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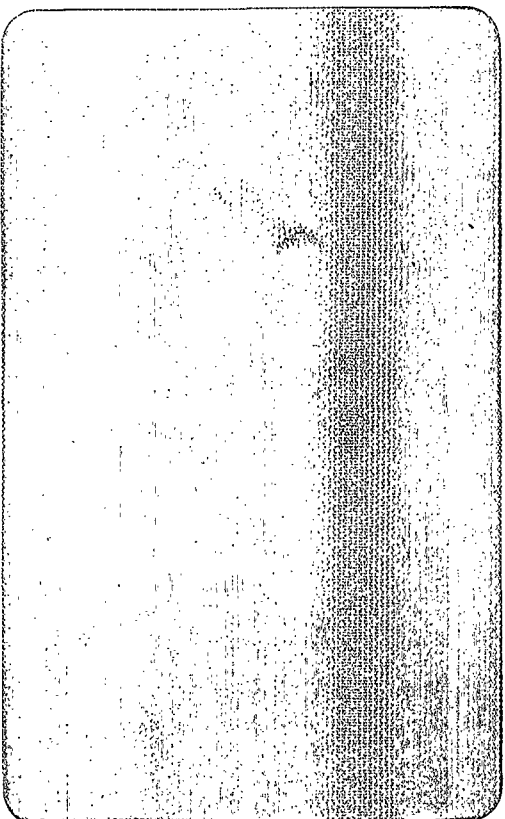
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Additional Subsurface Sump and  
Clarifier Investigation at  
The Stooddy Company  
16425 East Gale Avenue  
City of Industry, California

Clayton Project No. 33508.00

April 16, 1991

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## Executive Summary

The Stooddy Company retained Clayton Environmental Consultants, Inc. to conduct an additional subsurface investigation around the sump and clarifier at the Stooddy Company facility located at 16425 Gale Avenue, City of Industry, California.

Previously, Clayton installed four groundwater monitoring wells at the facility, and drilled and sampled soil boreholes near the clarifier and sump/drum storage area. Quarterly groundwater sampling and analysis has been performed for the year 1990. Additionally, the clarifier was emptied of liquid and solid waste in order to pressure wash and examine the interior walls for cracks or other indications of points of leakage. A representative of the California Regional Water Quality Control Board, Los Angeles Region (CRWQCB) was onsite to document the clarifier inspection. At that time no obvious points of leakage were observed. All work to date conducted by Clayton has been under approval of the CRWQCB.

Tasks completed for this phase of investigation included:

- Preparation and approval of a workplan by the CRWQCB.
- Drilling and sampling of four boreholes. Two boreholes were located around the sump located in the former barrel storage area. Two boreholes were located near the clarifier. These boreholes were not converted to monitoring wells, but were used to assess the extent of possible chemical contamination in the vadose zone near the two man-made structures.
- Drilling, soil sampling, installation, development, and water sampling of one additional monitoring well.
- Evaluation of field data and laboratory analytical results.
- Preparation of a report summarizing activities and making recommendations for further action.

Completion of this work revealed:

The clarifier area was evaluated using laboratory analyses of soil samples from MW-5, BH-10, and BH-11. Total recoverable petroleum hydrocarbons (TRPH) above the cleanup level were reported in samples from BH-10 (230 to 21,000 mg/kg), in MW-5 (20 to 30 mg/kg), and in BH-11 (20 to 90 mg/kg). Organic compounds above cleanup levels were detected in soil samples from BH-10 (1,2-DCE, 0.02 mg/kg, 15 feet; toluene, 8.8 mg/kg, 15 feet). Copper and nickel were reported in soil samples above cleanup levels using TTLC results, but below cleanup levels using STLC results.

The sump area was evaluated using laboratory analyses of soil samples from BH-12 and BH-13. TRPH, above the cleanup level, was detected in BH-12 (TRPH, 20 mg/kg, 20 feet).

Organic compounds above cleanup levels were detected in soil samples from BH-12 (1,2-DCE, 0.41 to 0.008 mg/kg, 1 foot and 20 to 25 feet) and BH-13 (1,2-DCE, 0.5 to 0.009 mg/kg, 1 to 5 feet and 30 feet; PCE, 0.17 mg/kg, 1 foot). Copper and nickel were reported in soil samples above cleanup levels using TTLC results, but below cleanup levels using STLC results. Chromium VI was detected in various soil samples using TTLC results, but not detected using STLC results.

## **1.0 INTRODUCTION**

The Stoody Company retained Clayton Environmental Consultants, Inc. to perform an additional subsurface soil and groundwater investigation at their facility located at 16425 East Gale Avenue, City of Industry, California (Appendix A; Figures 1 and 2). This work was performed in accordance with the Terms and Conditions described in Clayton's Proposal No. 91-SEE-004 dated January 21, 1991, and under Clayton's Project No. 33508.00.

### **1.1 BACKGROUND**

In response to a letter from the CRWQCB dated October 22, 1990, Stoody Company retained Clayton Environmental Consultants to prepare a workplan to perform additional investigative work in the area of a sump and three-stage clarifier at the Stoody facility (Appendix B; File No. AB105.263). That work was performed in accordance with the Terms and Conditions described in Clayton's Proposal No. 90-SEE-148, dated October 29, 1990.

At the present time, Stoody has installed four groundwater monitoring wells at their facility, and drilled and sampled soil boreholes near the clarifier and the sump/drum storage area. Quarterly groundwater sampling and analysis has been performed for the last year (1990).

Early in the calendar year 1990, Clayton performed investigative drilling and soil sampling near the clarifier and sump area. Additionally, the clarifier was emptied of liquid and solid waste and the interior was pressure washed and examined for visible cracks or other indications of points of leakage in the presence of a CRWQCB representative. No obvious points of leakage or signs of containment failure were observed.

### **1.2 OBJECTIVES**

As outlined in the CRWQCB correspondence, the objective of this subsurface investigation is to:

- Further assess the extent of soil and groundwater contamination at the Stoody facility in the vicinity of the clarifier and sump

Past objectives for soil investigations at Stoody have concentrated on evaluating whether or not subsurface contamination exists and at what levels, and to assess if contamination exists around the clarifier and sump.

### **1.3 SCOPE OF WORK**

The following scope of work was completed for the clarifier and sump investigation.

#### **1.3.1 Vadose Zone Investigation**

- Drilled and sampled two boreholes around the sump located in the former barrel storage area, and two boreholes around the clarifier (Appendix A; Figures 3 and 4). The boreholes were drilled to a depth of 30 feet. Samples were collected every 5 feet starting just below the ground surface.



### 1.3.2 Groundwater Investigation

- Drilled and sampled one shallow borehole immediately downgradient of the clarifier. Installed a groundwater monitoring well in the borehole, screened to intercept the first occurrence of groundwater, to assess water quality immediately downgradient of the clarifier. The borehole was extended to approximately 20 feet below groundwater.
- Properly sealed and preserved soil and groundwater samples, and transported them to a state certified laboratory for analysis using standard chain-of-custody procedures.
- Developed the monitoring well 6 days after well installation. Obtained groundwater samples 6 days after well development.
- Analyzed soil and groundwater samples using various EPA methods (2-week turnaround time).
- Evaluated field data and laboratory analytical results.
- Prepared a report summarizing activities, and submitted it with recommendations to the CRWQCB.

## 2.0 FIELD ACTIVITIES

### 2.1 VADOSE ZONE INVESTIGATION

On January 31, and February 1, 1991, Mr. Guy Romine, Environmental Consultant with Clayton, supervised the drilling and sampling of five exploratory boreholes (MW-5, BH-10, BH-11, BH-12, and BH-13) to a depth of 30 feet below ground surface, with the exception of MW-5 which was drilled to approximately 50 feet below ground surface. Drilling services were provided by H-F Drilling, Inc. under subcontract to Clayton, using a Failing™ F-10 type drill rig which uses a continuous-flight, hollow-stem auger drilling technique. Also, on these dates Mr. Romine supervised the installation of one monitoring well in borehole MW-5.

Boreholes BH-10, BH-11, BH-12, and BH-13 were advanced to a depth of approximately 30 feet. Borehole MW-5 was advanced to a depth of 50 feet. Soil samples were collected in each borehole at 5-foot intervals at 1, 5, 10, 15, 20, 25 and 30 feet below ground surface. Soil samples were not collected for analytical analysis below the 30-foot depth because groundwater generally saturates the samples below the 30-foot depth.

Clayton collected grab samples at 5-foot intervals below the 30-foot depth for soil logging and sieve analysis of grain size to be used in groundwater monitoring well design. Figures 2, 3, and 4 (Appendix A) show the location of each borehole and the new monitoring well installed at the facility.

Clayton was unable to install BH-14 and BH-15 due to utility clearance constraints. A buried 100 kilovolt (KV) electrical power line and a bank of electrical transformers are located on the east side of the clarifier preventing the installation of one of the proposed

boreholes. Additionally, overhead electrical lines prevented the installation of the second proposed borehole near the sump.

#### **2.1.1 Soil Sample Collection Methods**

The soil samples were collected using a 2-1/2-inch inside diameter (ID) split-barrel sampler, lined with three 6- by 2-1/2-inch outside diameter, brass sample tubes. The sampler was driven into the soil ahead of the hollow-stem auger using a 140-pound slide hammer. Each time the sampler was retrieved, a representative sample from the center sample sleeve was removed, logged and sealed by Mr. Romine.

The center brass sample tube was sealed on each end with aluminum foil and polyethylene caps. The caps were sealed to each end of the cylinder with Scotch™ 33+ electrical tape. These samples were then labeled, placed in self-sealing plastic bags, and stored under Blue-Ice™ in a portable ice chest for delivery to Clayton's state-certified laboratory, following standard chain-of-custody procedures.

A portion of the soil sample from the first brass tube at each sampling depth was placed in a labeled, self-sealing plastic bag and allowed to volatilize. These bagged samples were subjected to field headspace analysis using a photoionization detector (PID) after being allowed to volatilize for at least 20 minutes.

Additional soil from the third brass tube was used by a Clayton geologist, under the supervision of Mr. David Randell, a Clayton California Registered Geologist, to log the borehole using the Unified Soil Classification System (USCS). Auger returns (soil cuttings) generated during drilling were also described and these descriptions noted in the borehole logs. Results of the PID headspace analysis are also included on the borehole logs (Appendix C).

The hollow-stem augers and associated drilling equipment that had contact with the boreholes were steam cleaned between each borehole. The split-barrel sampler and brass tubes were washed in Alconox™ detergent solution, rinsed twice in tap water, and final rinsed in deionized water between the collection of each sample.

Soil cuttings generated by drilling were placed in labeled, Class 17-H, 55-gallon drums and stored onsite for proper disposal by Stooddy. After soil sampling was completed, each borehole was backfilled with a neat-cement grout to within about 1 foot of the surface and completed to grade with ready-mix concrete or completed as a monitoring well.

In summary, a total of 34 subsurface soil samples were retrieved from the site during this investigation. A total of 5 boreholes were drilled to assess the vertical and lateral extent of contamination; one of the five boreholes was converted to a monitoring well.

## **2.2 GROUNDWATER INVESTIGATION**

On January 31, 1991, the 50-foot borehole was converted to a monitoring well (MW-5). An approved monitoring well permit was obtained from the Los Angeles County Department of Health Services (Appendix B).

### 2.2.1 Monitoring Well Installation

The monitoring well was designed after review of the California Site Mitigation Decision Tree Manual, the National Water Well Association publication titled, Selection and Installation of Well Screens and Gravel Packs (undated), and field observations from initial drilling and soil sampling. Based on grain-size analysis and field observation of fine-grained soil materials, Clayton decided to use a 0.01-inch well casing slot size. It was thought that the next available larger slot size (0.02-inch) would allow formation materials to rather readily enter the well bore, and the next available smaller size (0.006-inch) might clog with formation materials or hinder water flow into the wellbore. The wells were installed with a number 2/12 Lonestar sand. This sand pack was partially developed as explained below to minimize the potential for bridging and to better "pack" the filter material into place.

A Failing™ F-10 drill rig with continuous-flight, hollow-stem, 12-inch O.D. augers, was used to advance the borehole to a depth of 20 feet below the level of groundwater encountered in the borehole. At the bottom of the borehole, a final soil sample was taken to document the soil type at the bottom of the well.

The well casing was lowered into the annular space of the augers. The well casing consisted of 4-inch inside diameter (I.D.) Schedule 40 threaded PVC blank and number 304 stainless steel slotted screen. Thirty feet of 0.01-inch machined slot well screen with end cap made up the lower portion of each well. Approximately 20 feet of screen was placed below the groundwater level and 10 feet of screen was placed above. This was topped by blank PVC casing which extended upward to the ground surface. The blank casing was topped by a PVC slip cap. Joints between casing and screen are threaded and flush.

The well filter pack (number 2/12 Lonestar sand) was hand-poured into the annular space of the augers, between the augers and the well casing. The filter pack extended from about 1 foot below the bottom of the casing to approximately 3 feet above the top of the screened interval of the casing. The wells were partially developed with a surge block to settle the filter pack. Additional filter pack was added after any settling to maintain the desired level of the filter pack above the top of the screen.

After filter pack installation, 1/4-inch diameter bentonite pellets were hand-placed as a well seal on top of the filter pack. The pellets were hydrated with deionized water, maintaining a ratio of approximately 1 gallon of water per 6-inch layer of pellets. The pellets were allowed to hydrate for approximately 30 minutes. After that time, a cement-bentonite grout was placed on top of the well seal. A locking, flush-mounted, heavy-duty wellhead box was imbedded in the cement grout in order to protect the wellhead. A well completion diagram, grain-size analysis for well design, and a copy of the well permit are provided in Appendix D.

### 2.2.2 Well Development

Clayton supervised H-F Drilling during the development of monitoring well MW-5, 6 days after installation. Well development was performed with a bottom-filling steel bailer and surge block attached to a truck-mounted mast/pulley system.

The well was bailed, initially with the steel bailer, to remove sediment present in the bottom of the well. The surge block was then used to surge the screened interval of the well. The surge block was raised and lowered in 3-foot intervals within the screened portion of the well. This was done in order to draw sediment into the well bore. After surging was completed, the wells were bailed again with the steel bailer to remove the sediment brought into the wells by surging. Three bailing and surging cycles were completed on the well.

After the bailing and surging cycles were completed, a submersible pump was lowered into the well, however, the well pumped dry before three casing volumes were removed. Water quality parameters (pH, temperature, and electrical conductivity) were measured during surging and pumping (Appendix E).

Development continued until the measured parameters were within 10 percent of those of the previous casing volume, indicating parameter stabilization, and the water drawn from the wells appeared relatively free of suspended sediment. The development purge water generated during development and sampling was placed in labeled, Class 17-H 55 gallon drums and stored onsite for proper disposal by Stoddy.

### **2.2.3 Well Sampling**

Clayton sampled Monitoring Well MW-5 twelve days after well installation.

A minimum of three casing volumes of water were removed from the well. The water was removed through the use of steel and PVC bailers. Water quality parameters (pH, temperature, and electrical conductivity) were measured after each casing volume was removed (Appendix E). Bailing was discontinued after the parameters stabilized to within 10 percent of the values obtained from the previous casing volume removed. Water samples were only collected after the water level in the well reached 80 percent of its original measured depth.

A hand-held Teflon<sup>TM</sup> bailer, attached to nylon line, was used to collect the groundwater samples. A Teflon<sup>TM</sup> stop-cock, bottom-emptying device was attached to the bailer for use during sample collection. The samples were collected using containers and preservative (hydrochloric acid) deemed appropriate by the sampling and preservation guidelines of the US EPA (EPA 40 CFR 136) and provided by Clayton's Pleasanton laboratory. The sample containers were labeled, wrapped in shock-absorbing foam sheeting, and placed on Blue-Ice<sup>TM</sup> in a portable cooler. The samples were transported to Clayton's state-certified laboratory in Pleasanton, California for analysis, under standard chain-of-custody procedures.

### **2.2.4 Monitoring Well Wellhead Survey**

Clayton subcontracted Mr. David Chung, P.E., a registered professional civil engineer, to transit-survey the location of monitoring well MW-5, and to tie the location of MW-5 into the pre-established monitoring well network (MW-1 through MW-4).

The elevation of the top of the casing of each well was surveyed, relative to sea level, from an established local benchmark. Horizontal distances and vertical elevations are accurate to within 0.01 feet. The well survey diagram, showing the wellhead locations and California

coordinates, is provided in Appendix F. Table 1 (Appendix A) presents the well coordinates and other pertinent well elevation/depth information.

### **3.0 LABORATORY ANALYTICAL RESULTS**

Laboratory analyses were provided by Clayton's state-certified laboratory in Pleasanton, California. Laboratory analytical reports, along with the chain-of-custody forms are provided in Appendix G. Laboratory analytical results for soil samples are summarized in Table 2 (Appendix A).

#### **3.1 SOIL SAMPLE ANALYTICAL RESULTS**

A total of 34 soil samples were collected for laboratory analysis during the vadose zone Investigation. Soil samples from each borehole drilled were collected at 1, 5, 10, 15, 20, 25 and 30 feet below the ground surface. However, in borehole BH-10, the 1-foot sample was not collected due to a drilling error. Soil samples were analyzed by the following EPA Methods:

- EPA Method 8240 for volatile organic compounds (VOCs)
- EPA Method 418.1 for total recoverable petroleum hydrocarbons (TRPH)
- Various EPA Methods for chromium, nickel, and copper

Based on the laboratory analysis of the soil samples, Clayton's findings are as follows:

- 1,2-Dichloroethene (1,2-DCE) was detected in soil samples from Boreholes BH-10, BH-12 and BH-13. The contaminant concentration ranged from 0.005 milligrams per kilogram (mg/kg) to 0.050 mg/kg in the three boreholes. The highest concentration of 0.050 mg/kg was reported in BH-13 at the 1-foot depth. The lowest concentration was 0.005 mg/kg in BH-12 at the 5-foot depth.
- Trichloroethene (TCE) was detected above the level of detection in soil samples from Boreholes BH-12 and BH-13. TCE was reported at 0.011 mg/kg and 0.062 mg/kg in the boreholes at a depth of 1 foot. These two detections were the only reported concentrations of TCE in the samples collected.
- Tetrachloroethene (PCE) was detected in boreholes MW-5, MW-10, MW-12, and MW-13. The concentrations of PCE ranged from 0.004 mg/kg in both MW-5 and BH-10 to 0.170 mg/kg in the 1-foot sample from BH-13. The limit of detection for PCE is 0.004 mg/kg.
- Toluene was detected in each borehole drilled during the investigation. The detections ranged from 0.002 mg/kg in the 5-foot samples from BH-11 to 8.8 mg/kg in the 15-foot sample from BH-10. A majority of the samples collected reported concentrations of toluene above the laboratory limit of detection of 0.002 mg/kg.
- Ethylbenzene was reported in only one soil sample collected. Ethylbenzene was reported in the 15-foot sample from BH-10 at a concentration 0.020 mg/kg. The laboratory limit of detection for ethylbenzene is 0.003 mg/kg.

- Acetone was detected in boreholes BH-10, BH-12, BH-13. Each borehole reported one detection apiece. BH-10 reported acetone in the 20-foot sample at a concentration of 0.20 mg/kg. BH-12 had a detection in the 1-foot sample reporting a concentration of 0.060 mg/kg. Acetone was also found in BH-13 at the 5-foot level at a concentration of 0.03 mg/kg. The laboratory limit of detection for acetone is 0.02 mg/kg.
- Total xylenes were detected in soil samples from Borehole BH-10; the concentrations ranged from 0.07 mg/kg in the 10-foot sample to 0.17 mg/kg in the 15-foot sample. The limit of detection for total xylenes is 0.003 mg/kg.
- TRPHs were detected in each of the boreholes drilled during this investigation, however only one borehole reported levels above 100.0 mg/kg. Borehole BH-10 reported TRPH concentrations as high as 21,000 mg/kg to a low of 230 mg/kg. The limit of detection for TRPH is 10 mg/kg.
- Chromium (VI) was reported in soil samples from MW-5 and BH-11 (clarifier), and BH-13 (sump) from total threshold limit concentration (TTLC) analysis. Chromium (VI) was not detected in any of the samples from any of the boreholes using STLC analysis.
- Nickel and copper were detected in a soil sample from each borehole in both the clarifier and sump areas using the results of TTLC analyses.

### 3.2 GROUNDWATER ANALYTICAL RESULTS

Groundwater samples were collected from monitoring well MW-5. The groundwater sample was analyzed by EPA Method 524.2 for volatile organic compounds in drinking water, EPA Method 418.1 for TRPH, EPA Method 150.1 for pH, and EPA Method 180.1 for turbidity.

The results of the laboratory analyses of groundwater samples are summarized in the following table.

MW No.	CLF	1,1-DCE	Cis 1,2-DCE	Total 1,2-DCE	PCE	1,1,1-TCE	TCE	TFCM
MW-5	0.7	16	2.1	2.1	100	1.8	34	2.2
DHS DWAL or MCL for Corresponding Compounds	*100	*6.0	6.0	NA	5.0	*200	*5.0	150
LOD for Corresponding Compounds	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Trip Blank	ND	ND	ND	ND	ND/0.7	ND	ND	ND
Method Blank	ND	ND	ND	ND	ND	ND	ND	ND

ND: Not detected at or above limit of detection  
 µg/L: Micrograms per liter (generally equivalent to parts per billion)  
 NA: Information not available  
 DHS: State of California Department of Health Services  
 DWAL: Drinking water action level  
 \*MCL: Maximum contaminant level  
 LOD: Limit of detection  
 CLF: Chloroform  
 DCE: Dichloroethene  
 PCE: Tetrachloroethene  
 TCE: Trichloroethane  
 TFCM: Trichlorofluoromethane

Detectable levels of chemical constituents reported in groundwater from monitoring well MW-5 are discussed below:

EPA Method 524.2 for volatile organic compounds reported eight organic compounds detected at or above the limits of detection. Three of the eight compounds reported exceeded either the EPA MCL or the State of California DHS DWAL. These three were 1,1-dichloroethene, tetrachloroethene, and trichloroethane.

Laboratory analysis of the water sample from MW-5 reported no detection of TRPH at or above 1.0 mg/L (the limit of detection). EPA Method 150.0 for pH reported a pH value of 7.91. EPA Method 180.1 for turbidity reported a value of 1.5 nephelometric turbidity units.

### 3.3 QUALITY ASSURANCE AND QUALITY CONTROL

For quality assurance and quality control (QA/QC) a trip blank and field blank were submitted for analysis by EPA Method 524.2. Analytical results reported low concentrations of methylene chloride and tetrachloroethene in the trip blank, and low concentrations of dibromochloromethane, methylene chloride, and tetrachloroethene in the field blank.

Methylene chloride is a common laboratory reagent. Dibromochloromethane is a compound found in treated potable water. Tetrachloroethene was found in relatively high

concentrations in samples collected from the monitoring wells. The low concentrations reported in the field blank may have been introduced into the decontamination rinse water from which the field blank was collected. The concentrations are very low. The highest concentration detected in the field blank was 1.8 µg/L. This is only 1.3 µg/L above the limit of detection for this compound.

The presence of these compounds in the trip and field blanks may be a result of storage and shipping technique. In an effort to recycle waste paper, shredded paper was used as shock-absorbing packing material. It is not known whether this affected the samples. However, it is unlikely that this affected the analytical results of the groundwater samples, considering the difference in magnitude of the concentrations of the compounds detected in the groundwater samples versus those detected in the trip and field blanks. Clayton is currently reviewing both their laboratory and field techniques to ascertain where the reported compounds may have come from, and will initiate procedure changes to halt this occurrence as necessary.

#### **4.0 CRWQCB MANDATED CLEANUP LEVELS**

The CRWQCB mandated specific soil and groundwater cleanup levels for compounds detected in soil samples from the sump and clarifier areas at the facility (Table 3).

According to their October 22, 1990, correspondence, TRPH in soil is not to exceed 10 mg/kg. The various other compounds detected are not to exceed 10 times the California Department of Health Services (DHS) DWAL or the USEPA MCL. If these values are exceeded, cleanup is required down to these levels.

To Clayton's best knowledge, Table 3 is a summary of these action levels for soil with the units of measurement changed to match laboratory result units, namely mg/kg (or parts per million at standard conditions).

Chromium VI was reported in soil samples from MW-5, BH-11, and BH-13 from TTLC analysis, but not above a cleanup level of 0.5 mg/kg. Chromium VI was not detected in any of the soil samples tested from any of the boreholes using soluble threshold limit concentration (STLC) analysis. Copper and nickel were detected in soil samples above the action levels based on TTLC analyses, but not above the action levels based on STLC analyses.

TRPH was reported above the cleanup level near the clarifier and extends vertically to a depth of 20 feet. Reported concentrations ranged from 230 to 21,000 mg/kg in Borehole BH-10. TRPH extends vertically at slightly elevated values to the depth of investigation in MW-5 and BH-11. The TRPH levels in MW-5 are 30 mg/kg from 1 to 10 feet and 200 mg/kg from 15 to 30 feet. The TRPH levels in BH-11 are 20 mg/kg from 1 to 10 feet, 90 mg/kg at 15 feet, and 20 mg/kg from 20 to 30 feet.

VOCs above cleanup levels near the clarifier occur only in soil samples from BH-10. 1,2-DCE occurs at 15 feet at a level about 4 times above the cleanup level. Toluene occurs at 15 feet at a level about 6 times the cleanup level.



TRPH was reported above the cleanup level near the sump and occurred only at a depth of 15 feet in BH-12 (20 mg/kg). Organic compounds above cleanup levels, were reported in two occurrences in BH-12. 1,2-DCE occurs at 1-foot at a level about 80 times the cleanup level, and at 20 to 25 feet at about 1.5 times the cleanup level. 1,2-DCE occurs in BH-13 at 1-foot (about 10 times the cleanup level), at 5 feet (2 times the cleanup level), and at 30 feet (2 times the cleanup level). PCE also occurs in BH-13 at 1-foot (about 3.5 times the cleanup level).

Laboratory analysis of the groundwater sample from Monitoring Well MW-5 reported the detection of eight VOCs. Three of the eight exceed either the DHS DWAL or the EPA MCL. The three included 1,1-DCE (nearly 3 times over the MCL), PCE (20 times over the DWAL), and TCE (nearly 5 times over the MCL). TRPH was not reported in the water sample from MW-5 at a detection limit of 1.0 milligram per liter (mg/L).

## **5.0 CONCLUSIONS AND RECOMMENDATIONS**

### **5.1 CONCLUSIONS**

Based on our observations made during the current investigation and the results of the laboratory analyses, Clayton concludes the following:

#### **5.1.1 Clarifier**

The north side of the clarifier area is contaminated with TRPH at levels from 230 to 21,000 mg/kg from the surface to a depth of 20 feet, but the TRPH contamination drops significantly on the southern side of the clarifier (mostly 20 to 30 mg/kg levels). Two organic compounds occur above cleanup levels on the north side of the clarifier, at levels about 4 to 6 times above cleanup levels. Organic compounds on the south side of the clarifier were not detected above cleanup levels.

#### **5.1.2 Sump**

A low-level detection of TRPH was reported on the south side of the sump above the cleanup level (20 mg/kg at 15 feet). TRPH above the cleanup level was not reported in any other samples taken from the sump area. Two organic compounds were detected above cleanup levels in the sump area, in generally two depth intervals: one interval occurs at 1 to 5 feet below grade; the second occurs at 20 to 30 feet below grade. Detected concentrations of organics are higher in the shallow interval (3.5 to 80 times cleanup levels) than in the deeper interval (about 1.5 to 2 times cleanup levels).

### **5.2 RECOMMENDATIONS**

Based on the conclusions of the work completed, Clayton makes the following recommendations:

### 5.2.1 Clarifier

Excavate and remove the clarifier. Excavate soil in a 10- by 12- by 12- foot volume to remove the majority of TRPH and the reported organics. Dispose of the contaminated soil offsite in a hazardous waste landfill. Collect and analyze soil samples from under the clarifier to assess remaining contaminant concentrations, if any. Appropriately backfill and compact the excavation.

### 5.2.2 Sump

Excavate and remove the sump. Excavate soil in an 8- by 8- by 10- foot volume and dispose of the contaminated soil offsite in a hazardous waste landfill. Collect and analyze soil samples from under the sump to assess remaining contaminant concentrations, if any. Appropriately backfill and compact the excavation.

Negotiate with the CRWQCB to leave in place the low levels of volatile organic compounds that occur below the depth of excavation.

The information and opinions rendered in this report are exclusively for use by The Stood Company. Clayton Environmental Consultants, Inc. will not distribute this report without your consent except as may be required by law or court order. The information and opinions expressed in this report are given in response to our limited assignment and should be evaluated and implemented only in light of that assignment. We accept responsibility for the competent performance of our duties in executing the assignment and preparing this report in accordance with the normal standards of our profession but disclaim any responsibility for consequential damages.

This report submitted by:

Shannon Gillespie FOR  
Guy K. Romine  
Environmental Consultant

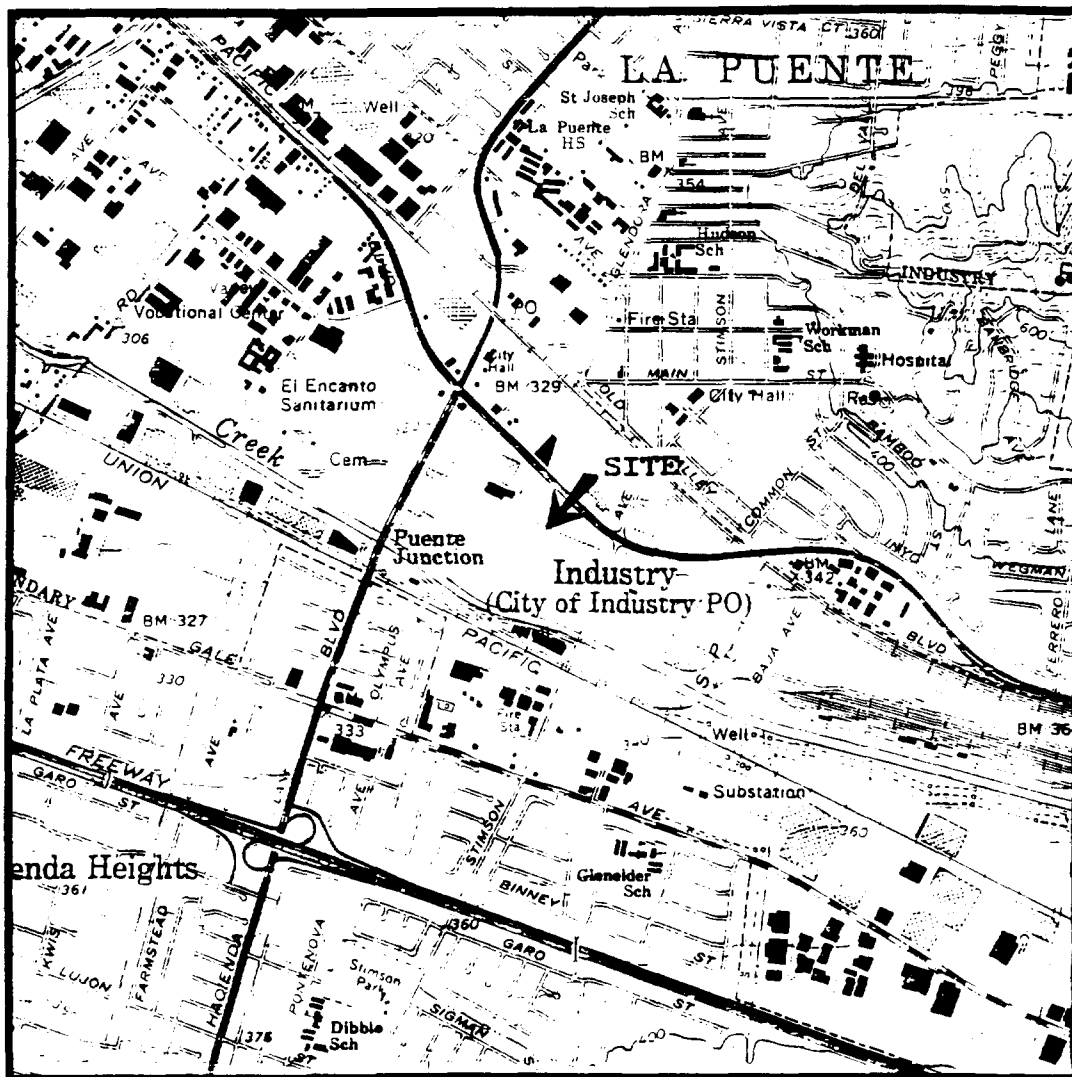
This report reviewed by:

David H. Randell  
David H. Randell  
Registered Geologist, No. 3977  
Supervisor, Environmental Engineering  
Pacific Operations

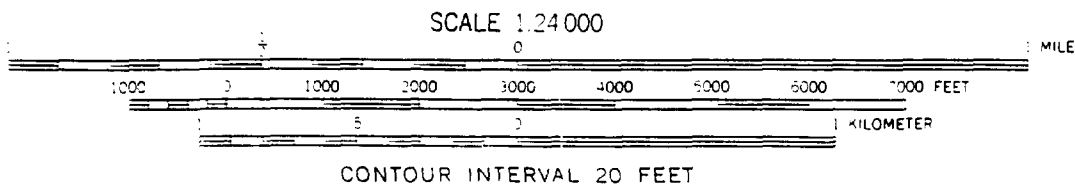
April 16, 1991

# APPENDIX A

## FIGURES AND TABLES



BASEMAP TAKEN FROM 1966 USGS BALDWIN PARK, CALIFORNIA  
QUADRANGLE. 7.5 MINUTE SERIES (TOPOGRAPHIC), PHOTOREVISED 1981.



CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

FIGURE

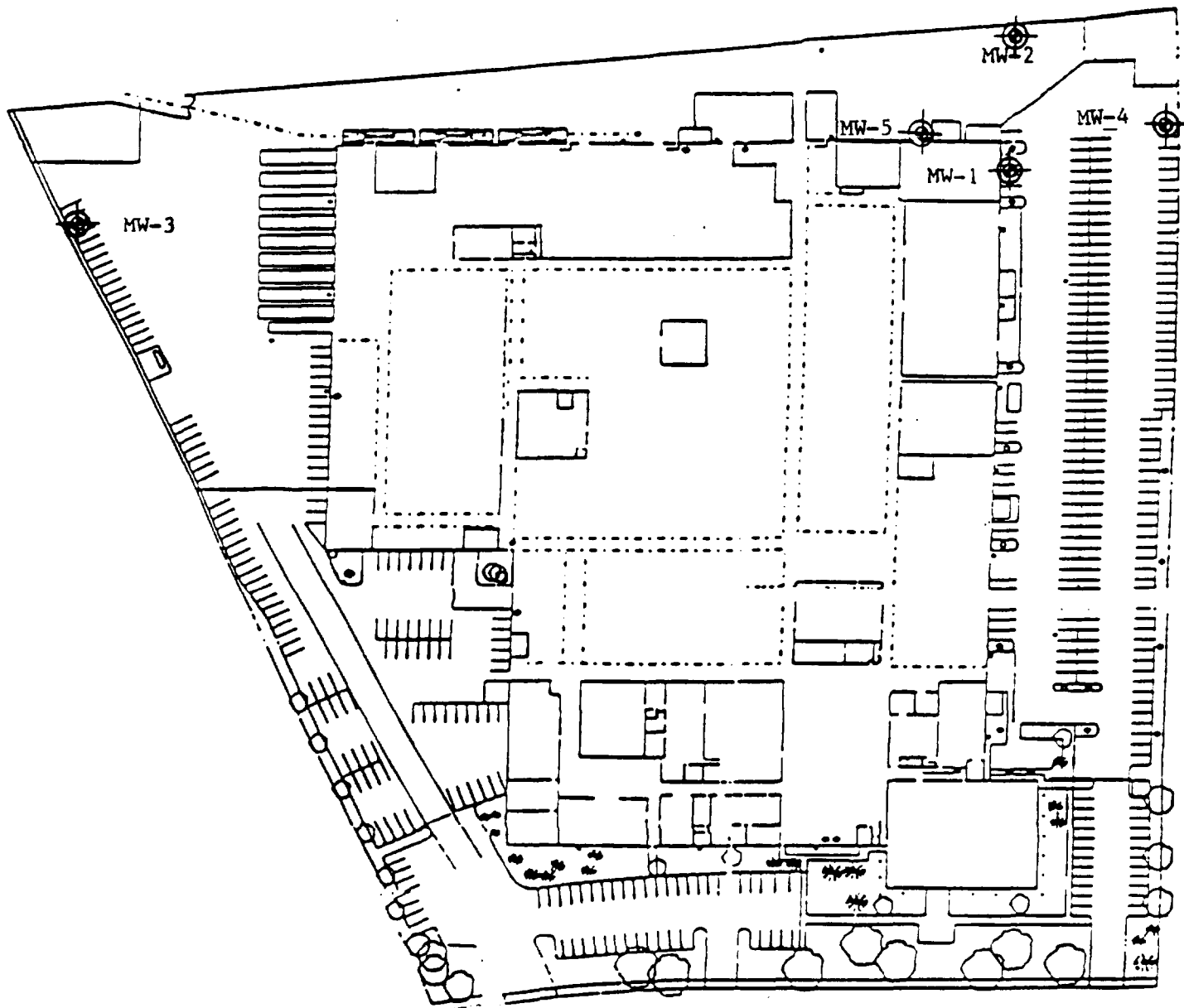
GENERAL SITE LOCATION  
AND TOPOGRAPHY

1

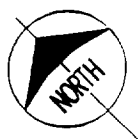
STOODY COMPANY  
INDUSTRY, CALIFORNIA

PROJECT NO. 33508.00

3/91



SCALE: 1 INCH = 150 FEET



CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

FIGURE

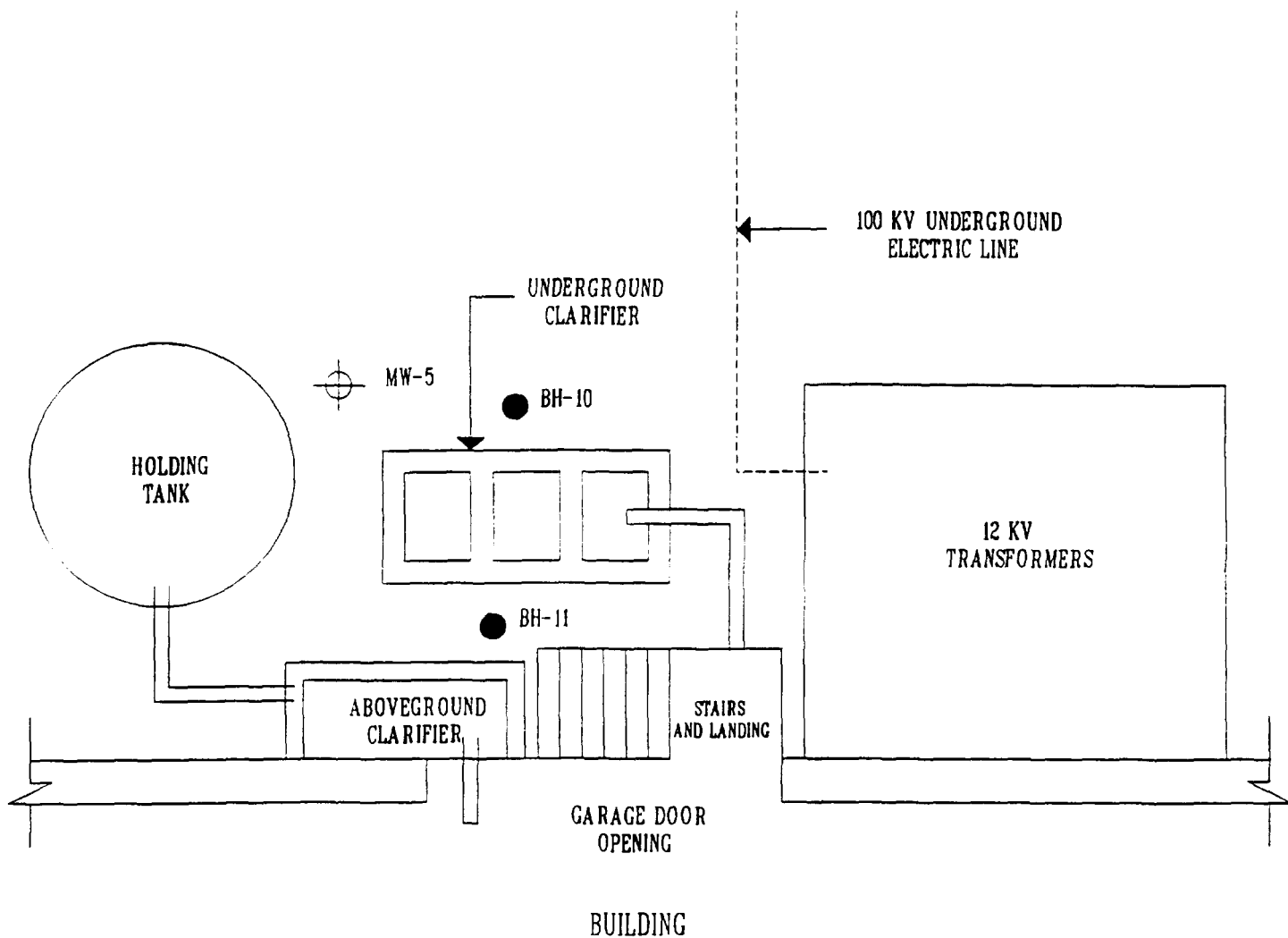
SITE PLOT PLAN



2

STOODY COMPANY  
INDUSTRY, CALIFORNIA

PROJECT NO. 33508.00

3/91



-  APPROXIMATE MONITORING WELL LOCATION  
 APPROXIMATE BOREHOLE LOCATION

DRAWING NOT TO SCALE



CLAYTON ENVIRONMENTAL CONSULTANTS, INC.	FIGURE
BOREHOLE LOCATION MAP	3
STOODY COMPANY INDUSTRY, CALIFORNIA	PROJECT NO. 33508.00 3/91

RAILROAD TRACKS

HIGH VOLTAGE OVERHEAD POWER LINES

BH-13

BH-12

CHEMICAL AND WASTE  
STORAGE AREA

FORMER  
SUMP

● APPROXIMATE BOREHOLE LOCATION

--- FENCE LINE

--- CURB LINE

DRAWING NOT TO SCALE



CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

FIGURE

BOREHOLE LOCATION MAP

4

STOODY COMPANY  
INDUSTRY, CALIFORNIA

PROJECT NO. 33508.00

3/91

**Table 1**  
**Groundwater Monitoring Well Data**  
**at**  
**Stoody Company**  
**City of Industry, California**  
**Clayton Project No. 33508.00**  
**Sampling Dates: December 27, 1990 and February 13, 1991**

Elevations (feet)					
Monitoring Well	MW-1	MW-2	MW-3	MW-4	MW-5
California Coordinates Northerly	4 115 352.91	4 115 446.16	4 115 618.47	4 115 317.93	4 115 437.54
California Coordinates Easterly	4 304 877.74	4 305 930.76	4 304 433.56	4 305 006.96	4 304 813.76
Elevation at top of well casing (MSL)	352.18	351.12	349.34	353.55	351.64
Total depth of well after development	44.90	44.95	44.85	48.68	49.86
Date of measurement	3/6/91	3/6/91	3/6/91	3/6/91	3/6/91
Depth to water from top of casing	31.12	30.04	32.17	31.65	30.62
Elevation of water (MSL)	321.06	321.08	317.17	321.90	321.02



**Table 2**  
**Summary of Laboratory Analytical Results**  
**for Soil Samples, EPA Methods 8240 and 418.1**  
 at  
 Stoddy Company  
 Industry, California  
 Clayton Project No. 33508.00  
 Sampling Date: February 1, 1990

Borehole No.	Sample	Depth (feet)	EPA Method 5030/82400 [Low Level (mg/kg)]							EPA Method 418.1	STLC (mg/kg)			TTLC (mg/kg)		
			Total 1,2 DCE	TCE	PCE	Toluene	Ethylbenzene	Acetone	Total Xylenes	TRPH (mg/kg)	Cr <sup>++</sup>	Cu	Ni	Cr <sup>++</sup>	Cu	Ni
MW-5	A	1	ND	ND	ND	0.010	ND	ND	ND	30	<0.01	0.3	<0.1	0.1	45	31
	B	5	ND	ND	ND	0.008	ND	ND	ND	30						
	C	10	ND	ND	ND	0.005	ND	ND	ND	30						
	D	15	ND	ND	ND	ND	ND	ND	ND	20						
	E	20	ND	ND	ND	0.013	ND	ND	ND	20						
	F	25	ND	ND	0.004	0.003	ND	ND	ND	20						
	G	30	ND	ND	ND	0.012	ND	ND	ND	20						
BH-11	A	1	ND	ND	ND	0.028	ND	ND	ND	20	<0.01	0.2	0.6	0.4	24	17
	B	5	ND	ND	ND	0.002	ND	ND	ND	20						
	C	10	ND	ND	ND	ND	ND	ND	ND	20						
	D	15	ND	ND	ND	ND	ND	ND	ND	90						
	E	20	ND	ND	ND	ND	ND	ND	ND	20						
	F	25	ND	ND	ND	0.004	ND	ND	ND	20						
	G	30	ND	ND	ND	ND	ND	ND	ND	20						
Method Blank			ND	ND	ND	ND	ND	ND	ND	< 10						

µg/kg: Micrograms per kilogram, generally equivalent to parts per billion  
 mg/kg: Milligrams per kilogram, generally equivalent to parts per million  
 ND: Not detected at or above limit of detection -  
 Detection limits for EPA method 8240 range from 0.002 to 0.010 mg/kg  
 See laboratory analytical results in Appendix G for specific detection limits

Total 1,2-DCE: 1,2-dichloroethene (total)  
 TCE: Trichloroethene  
 PCE: Tetrachloroethene  
 STLC: Soluble threshold limit concentration  
 Cr<sup>++</sup>: Total chromium (VI)  
 Cu: Copper  
 Ni: Nickel

**Table 2 (continued)**  
**Summary of Laboratory Analytical Results**  
**for Soil Samples, EPA Methods 8240 and 418.1**  
**at**  
**Stoody Company**  
**Industry, California**  
**Clayton Project No. 33508.00**  
**Sampling Date: February 1, 1991**

Borehole No.	Sample	Depth (feet)	EPA Method 5030/8240 [Low Level (mg/kg)]							EPA Method 418.1	STLC (mg/kg)			TTLC (mg/kg)		
			Total 1,2 DCE	TCE	PCE	Toluene	Ethylbenzene	Acetone	Total Xylenes	TRPH (mg/kg)	Cr <sup>++</sup>	Cu	Ni	Cr <sup>++</sup>	Cu	Ni
BH-10	B	5	ND	ND	0.04	0.04	ND	ND	ND	16,000	<0.01	<0.1	0.31	<0.1	35	17
	C	10	ND	ND	ND	0.82	ND	ND	0.07	21,000						
	D	15	0.02	ND	0.04	8.8	0.02	ND	0.17	14,000						
	E	20	ND	ND	ND	0.02	ND	0.20	ND	230						
	F	25	ND	ND	ND	ND	ND	ND	ND	<10						
	G	30	ND	ND	ND	ND	ND	ND	ND	<10						
BH-12	A	1	0.41	0.062	0.014	0.026	ND	0.06	ND	<10	<0.01	0.3	0.6	<0.1	28	25
	B	5	0.005	ND	0.014	0.005	ND	ND	ND	<10						
	C	10	ND	ND	ND	0.005	ND	ND	ND	<10						
	D	15	ND	ND	ND	ND	ND	ND	ND	20						
	E	20	0.007	ND	0.010	0.002	ND	ND	ND	10						
	F	25	0.008	ND	0.004	ND	ND	ND	ND	<10						
	G	30	ND		0.008	0.008	ND	ND	ND	<10						

µg/kg: Micrograms per kilogram, generally equivalent to parts per billion  
mg/kg: Milligrams per kilogram, generally equivalent to parts per million  
ND: Not detected at or above limit of detection -  
Detection limits for EPA method 8240 range from 0.002 to 0.010 mg/kg  
See laboratory analytical results in Appendix G for specific detection limits

Total 1,2-DCE: 1,2-dichloroethene (total)  
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Cu: Copper  
Ni: Nickel

**Table 2 (continued)**  
**Summary of Laboratory Analytical Results**  
**for Soil Samples, EPA Methods 8240 and 418.1**  
**at**  
**Stoody Company**  
**Industry, California**  
**Clayton Project No. 33508.00**  
**Sampling Date: February 1, 1991**

Borehole No.	Sample	Depth (feet)	EPA Method 5030/8240 [Low Level (mg/kg)]							EPA Method 418.1	STLC (mg/kg)			TTLC (mg/kg)		
			Total 1,2 DCE	TCE	PCE	Toluene	Ethylbenzene	Acetone	Total Xylenes	TRPH (mg/kg)	Cr <sup>++</sup>	Cu	Ni	Cr <sup>++</sup>	Cu	Ni
BH-13	A	1	0.05	0.011	0.17	0.019	ND	ND	ND	< 10	< 0.01	0.4	0.7	0.1	20	16
	B	5	0.009	ND	0.008	ND	ND	0.03	ND	< 10						
	C	10	ND	ND	ND	ND	ND	ND	ND	< 10						
	D	15	ND	ND	ND	0.008	ND	ND	ND	< 10						
	E	20	ND	ND	ND	ND	ND	ND	ND	< 10						
	F	25	ND	ND	ND	ND	ND	ND	ND	< 10						
	G	30	0.009	ND	0.017	0.010	ND	ND	ND	10						
Method Blanks	NA	ND	ND	ND	ND	ND	ND	ND	ND	< 10						
	NA	NA	ND	ND	ND	ND	ND	ND	ND	< 10						

µg/kg: Micrograms per kilogram, generally equivalent to parts per billion

mg/kg: Milligrams per kilogram, generally equivalent to parts per million

ND: Not detected at or above limit of detection -

Detection limits for EPA method 8240 range from 0.002 to 0.010 mg/kg

See laboratory analytical results in Appendix G for specific detection limits

Total 1,2-DCE: 1,2-dichloroethene (total)

TCE: Trichloroethene

PCE: Tetrachloroethene

STLC: Soluble threshold limit concentration

Cr<sup>++</sup>: Total chromium (VI)

Cu: Copper

Ni: Nickel

Table 3  
Soil Cleanup Levels as Dictated by the CRWQCB  
at  
Stoody Company  
Industry, California  
Clayton Project No. 33508.00  
Sampling Date: February 1, 1990

Detected Chemical Constituents*	Abbreviation	DHS or MCL ( $\mu\text{g/kg}$ )	Cleanup Level** (mg/kg)
<u>Organic</u>			
Acetone	ACT	NA	NA
1,2-Dichloroethene (total)	1,2-DCE	0.5 MCL	.005
Cis-1,2-dichloroethene	Cis-1,2-DCE	6 MCL & DHS	0.06
Ethylbenzene	EB	680 MCL	6.80
Tetrachloroethene	PCE	5 MCL/DHS	0.050
Toluene	TOL	100 DHS	1.0
Trans-1,2-dichloroethene	TRANS-1,2-DCE	10 MCL & DHS	0.10
Trichloroethene	TCE	5 MCL	0.05
Total Petroleum Hydrocarbons	TRPH	NA NA	10.0
Xylene, (total)	XYL	1750 MCL	17.5
<u>Inorganic</u>			
Chromium <sup>+6</sup>	Cr <sup>+6</sup> Cr <sup>+6</sup>	50 MCL 50 MCL	0.5 0.5
Copper	Cu	1000 MCL	10.0
Nickel	Ni	150 SNARL	1.5

\*NA: Not available  
\*: Based on ethylene compounds  
\*\*: Values shown are 10 times DHS or MCL and converted to mg/kg  
DHS: California Department of Health Services  
MCL: EPA maximum contaminant level

SNARL: Suggested no adverse response level  
 $\mu\text{g/kg}$ : Microgram per kilogram, generally equivalent to parts per billion  
mg/kg: Milligram per kilogram, generally equivalent to parts per million

**APPENDIX B**  
**WORKPLAN AND CORRESPONDENCE**

1735 Corporate Avenue  
Suite 150  
Cypress, CA 90630  
Tel: (714) 229-4806  
Fax: (714) 229-4805

**Clayton**  
ENVIRONMENTAL  
CONSULTANTS

December 20, 1990

Clayton Project No: 32065.00

Ms. Nicole Jafari  
STOODY COMPANY  
16425 Gale Avenue  
City of Industry, CA 91745

Subject: Workplan for a Clarifier and Sump Investigation at the Stooddy Company  
Located at 16425 Gale Avenue, City of Industry, California

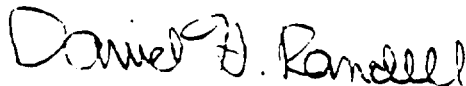
Dear Ms. Jafari:

Clayton Environmental Consultants, Inc. pleased to submit to you three copies of the subject workplan for your file and distribution to the California Regional Water Quality Control Board (CRWQCB).

We have incorporated your comments as stated in your December 14, 1990, memorandum. My concern is that the CRWQCB will not accept the workplan without the remediation steps you have asked me to delete and may contact you promptly to discuss/implement cleanup or removal of the clarifier and sump.

Thank you for allowing us to be of service to you during the preparation of this workplan. If you have any questions, please contact me at (714) 229-4806, or as indicated below.

Sincerely,



David H. Randell  
Supervisor, Environmental Engineering  
Southern California Operations

DHR/cb  
Attachment

E32065-B.REP

1715 Corporate Avenue  
Suite 100  
Cypress, CA 90630  
Tel: 714-229-4806  
Fax: 714-229-4805

**Clayton**  
ENVIRONMENTAL  
CONSULTANTS

Workplan  
for a  
Clarifier and Sump Investigation  
at  
The Stooddy Company  
City of Industry, California

Clayton Project No. 32065.00  
December 20, 1990

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- 1 GENERAL SITE LOCATION AND TOPOGRAPHY
- 2 VADOSE ZONE BOREHOLE AND MONITORING WELL LOCATIONS
- 3 PROPOSED TIME SCHEDULE FOR INVESTIGATION

### Table

- 1 PROPOSED LABORATORY ANALYSES

### Appendix

- A CRWQCB CORRESPONDENCE DATED OCTOBER 22, 1990
- B SUBSURFACE SOIL INVESTIGATION AND INDUSTRIAL CLARIFIER REPORT, FEBRUARY 28, 1990

## 1.0 INTRODUCTION

This document is a workplan prepared by Clayton Environmental Consultants, Inc. (Clayton) and The Stoody Company as requested by the California Regional Water Quality Control Board, Los Angeles Region (CRWQCB). It describes field, laboratory, and office activities associated with a clarifier and sump investigation for the Stoody Company facility located at 16425 Gale Avenue in the City of Industry, California (Figure 1).

### 1.1 BACKGROUND

In response to a letter from the CRWQCB dated October 22, 1990, Stoody Company contracted Clayton to prepare this workplan to perform additional investigative work at the Stoody facility (Appendix A: File No. AB105.263). The work was performed in accordance with the Terms and Conditions described in Clayton's Proposal No. 90-SEE-148, dated October 29, 1990. Written authorization to proceed was received on October 29, 1990.

At the present time, Stoody has installed four groundwater monitoring wells at their facility, and drilled and sampled nine other soil boreholes around their premises. At least five of these soil boreholes were shallow and placed near the clarifier (2) and the sump/drum storage area (3). Quarterly groundwater sampling and analysis has been performed for the last year.

Early in the 1990 year, Stoody performed investigative boring and soil sampling near the clarifier and sump area. Additionally, the clarifier was emptied of liquid and solid waste and the interior was pressure washed and examined for visible cracks or other indications of points of leakage in the presence of a CRWQCB representative (Appendix B). No obvious points of leakage or signs of containment failure were observed.

### 1.2 OBJECTIVES

As outlined in the CRWQCB correspondence, the objective of this subsurface investigation is to:

- Further assess the extent of soil and groundwater contamination at the Stoody facility in the vicinity of the clarifier and sump

Past objectives for soil investigations at Stoody have concentrated on evaluating whether or not subsurface contamination exists and at what levels.

The investigation proposed in this workplan takes the analysis one step further. This step is to define the lateral and vertical extent of contamination around the clarifier and sump.

It is important to be able to first measure the approximate extent of contaminated soil so that the appropriate remediation processes, equipment, and budgeting can be set up.

### 1.3 SCOPE OF WORK

The following scope of work is presented for the clarifier and sump investigation and is described more completely in the following sections.

#### 1.3.1 Vadose Zone Investigation

- Drill and sample three boreholes around the sump located in the former sump/barrel storage area, and four boreholes around the clarifier (Figures 2 and 3). The boreholes will be drilled to a depth of 30 feet or until groundwater is reached. Samples will be collected every 5 feet starting just below the ground surface. Depth to water at the site varies from 27 to 29 feet as measured in onsite monitoring wells.

#### 1.3.2 Groundwater Investigation

- Drill and sample one shallow borehole immediately downgradient of the clarifier. This borehole will be one of the four boreholes drilled near the clarifier. Construct a groundwater monitoring well in the borehole, screened to intercept the first occurrence of groundwater, to assess water quality immediately downgradient of the clarifier. The borehole will extend to 20 feet below groundwater.
- Properly seal and preserve soil and groundwater samples, and transport them to a state certified laboratory for analysis using standard chain-of-custody procedures.
- Develop the monitoring well at least two days after well installation. Obtain groundwater samples four to seven days after well development.
- Analyze soil and groundwater samples using various EPA methods (2-week turnaround time).
- Evaluate field data and laboratory analytical results.
- Prepare a report summarizing activities, and submit it with recommendations to the CRWQCB.

### 2.0 VADOSE ZONE INVESTIGATION

The vadose zone investigation is designed to assess the lateral and vertical extent of contamination by chemical compounds previously found in the soil in the areas around the sump and clarifier.

A total of seven soil boreholes will be drilled on the northeast side of the facility (Figures 2 and 3); four near the clarifier and three near the sump.

### 3.0 GROUNDWATER INVESTIGATION

A shallow groundwater monitoring well will be installed immediately downgradient of the clarifier to assess the quality of the shallow groundwater. The shallow well described in this section will be composed of 4-inch stainless steel and PVC materials. Specific information on construction of the well is discussed in Section 5.0.

### 4.0 VADOSE ZONE INVESTIGATION PROCEDURES

During the vadose zone investigation, a hollow-stem auger drill rig will be used to collect soil samples at the surface (1-foot below grade), at 5-foot intervals, and at significant changes in lithology or soil type, until the termination depth of the borehole is reached or groundwater is encountered. No soil sampling below groundwater will be attempted. Soil sampling and drilling techniques generally follow Department of Health Services, California Site Mitigation Decision Tree guidelines of May 1986.

A modified California split-barrel sampler with three 6-inch long, 2.5-inch outside diameter brass sleeves will be used to acquire relatively undisturbed samples at the required depths. The second brass liner will be sealed with aluminum foil, plastic end caps, and electrical tape. It will then be labeled, inserted in a self-sealing plastic bag, and placed on ice in an ice chest for transport to a California state-certified laboratory for analysis. Standard chain-of-custody procedures will be followed.

The boreholes and soil samples will be described by a Clayton geologist under the supervision of a California Registered Geologist using the Unified Soil Classification System (USCS). Borehole logs will be prepared to document these descriptions.

A portion of the soil sample from the first brass liner will be subjected to a field evaluation of volatile organic compounds using an OVA headspace technique. The headspace analysis will be performed by half-filling an 8-ounce glass jar with soil and capping the jar with aluminum foil and a Teflon™-lined lid. The jar will be allowed to volatilize in direct sunlight or other warm location for a minimum of 30 minutes. After the time has elapsed the lid will be removed and the sensor tip of a Photovac™ tip meter (PID) will be inserted through the aluminum foil covering the mouth of the jar. The level of VOCs in the jar headspace will be measured with the PID meter and recorded on the borehole logs. The tip meter will also be used to measure breathing zone and borehole concentrations of VOCs during drilling.

Drill cuttings will be placed in Class 17-H 55-gallon drums for disposal by Stooddy. The boreholes will be backfilled to grade using the augers as a tremie pipe with a volclay-bentonite grout mixture.

## 5.0 GROUNDWATER INVESTIGATION PROCEDURES

### 5.1 INSTALLATION OF A SHALLOW MONITORING WELL

A groundwater monitoring well will be installed in a borehole immediately downgradient of the clarifier. The borehole will be drilled and soils sampled as described in Section 4.0 using an 11-inch hollow-stem auger. Competent clay layers below the groundwater table, that is layers 5-feet thick or greater, will not be penetrated during drilling. The shallow borehole will be advanced using a hollow-stem auger drilling technique to groundwater and extended 20 additional feet. Soil sampling at 10-foot intervals will be attempted after groundwater is reached. It is estimated that depth to water will be 27 to 29 feet; total depth of the well would then be 47 to 49 feet.

When the auger tool encounters groundwater, a final sample will be taken and the drill auger advanced. When the borehole reaches a depth of 20 feet below the groundwater, a 4-inch I.D., threaded stainless steel well casing will be lowered into the annular space of the augers. Thirty feet of machined-slotted stainless steel well screen with a threaded or welded end plug at the bottom will be suspended in the borehole inside the augers so that 20 feet of screen is below the groundwater level and 10 feet is above. Blank casing will be attached to the screen and will extend from the top of the well screen to the surface. Any well casing below groundwater will be stainless steel; casing above groundwater will be Schedule 40 PVC.

With the augers in the borehole, the selected sand filter pack will be hand-poured into the annular space of the auger, between the auger and the well casing, to place a 1/2-foot to 1-foot thick layer of filter pack sand at the bottom of the borehole. Additional filter pack sand will be hand-poured in the same manner at a rate not to exceed 1 pound per second. The filter pack material will be placed so that it extends at least 18 inches to 2 feet above the top of the well screen. After filter pack installation, the well will be partially developed with a surge block to settle the filter pack and minimize the potential for bridging. Additional filter pack will be added if settlement occurs.

A 3-foot thick layer of 1/4- or 1/2-inch diameter bentonite pellets or crushed bentonite will be hand-placed on top of the filter pack as a well seal. The pellets will be hydrated as necessary with small quantities of deionized water (1 to 2 gallons per 6-inch layer). A volclay-bentonite grout will be placed on top of the bentonite seal, using the auger as a tremie pipe after the bentonite pellets have hydrated for at least 30 minutes. The wellhead will be capped with a vented PVC slip cap. A locking, flush-mounted, wellhead box will be imbedded in a 2-foot thick surface layer of concrete to protect the wellhead.

One sieve analysis will be performed on a soil sample taken from the well borehole. California Decision Tree, Johnson well screen design, and field observations and experience will be used to design the well screen slot size and filter pack for the well. Based on past well installations at the site, a 0.01-inch slot size and a Number 2 Monterey-type sand filter pack is likely appropriate.

## 5.2 DEVELOPMENT AND SAMPLING OF MONITORING WELL

Well development and groundwater sampling will occur after the well is installed. Well development will occur 48 to 72 hours after well installation. Groundwater sampling will be performed 4 to 7 days after well development. The well will be developed using a bailer and surge block. A small submersible pump may also be used for water removal.

Initially, the well will be bailed with a bottom-fill-type steel bailer to remove any sediment present in the bottom of the well. The screened interval in each well will then be surged using a surge block. The block will be raised and lowered about 10 times against the screen for each 3-foot interval. Following surging, the wells will be bailed again, using a bottom-fill-type steel bailer to remove sediment brought into the wellbore by the surging.

After bailing and surging, three to five well volumes of water will be removed from the well, either by PVC bailer or submersible pump. Water quality parameters (pH, temperature, electrical conductivity) will be measured during bailing or pumping. Development will be considered complete when water quality parameters have stabilized to within  $\pm 10$  percent of the values of the previous well volume removed, and the well is producing water relatively free of suspended sediment.

Prior to groundwater sampling, three casing volumes of water will be removed from the well. It is planned to use a small submersible pump to remove the water. A Teflon™ or Lexan™ bailer will be used to take the water samples. Water quality parameters (pH, temperature, electrical conductivity) will be measured at least after every casing volume of water is removed. Water samples will be taken after the three casing volumes of water have been removed and the water quality parameters stabilize to within  $\pm 10$  percent of the values measured from the previous casing volume.

Water samples will be collected using appropriate containers and preservatives according to EPA sampling and preservation guidelines (1984, 40 CFR136). Labeled samples will be wrapped in shock-absorbing materials, and placed on ice in a portable cooler. They will be transported to the testing laboratory for analysis (2-week turnaround time) under standard chain-of-custody procedures.

Water removed from the wells during development and sampling will be placed in Class 17, 55-gallon drums appropriate for water collection. Disposal of the drum contents is the responsibility of Stoodly.

## 5.3 PERMITS AND SURVEYING

The monitoring well installed at the site will be properly permitted with the Los Angeles County Department of Health Services and will be located by a licensed surveyor after installation.

The well permit process may require a site visit by a county inspector prior to approval. This may increase the permit procurement time to at least one week.

The elevation of the top of the well casing will be surveyed relative to sea level from the previously established groundwater well network. The wellhead location will be provided using California coordinates. The new well location will be incorporated into the existing well survey network.

#### 6.0 DECONTAMINATION OF DRILLING AND SAMPLING EQUIPMENT

Equipment used during the field investigations will be decontaminated to minimize the potential for cross contamination from location to location. The downhole drill rig equipment, surge blocks and steel bailers will be steam-cleaned prior to use in the well. Soil samplers, brass liners, and bailers will be washed in a detergent solution, rinsed twice in potable water, and final rinsed in deionized water. Well casing and screen will be either steam-cleaned and wrapped in plastic sheeting prior to delivery on site or will be steam-cleaned onsite prior to installation in the borehole.

#### 7.0 LABORATORY ANALYSIS PROGRAM

The laboratory analysis program includes several EPA method analyses. The work will be performed at Clayton's Pleasanton, California state-certified laboratory, or at the West Coast Analytical services state-certified laboratory in Santa Fe Springs, California.

Soil samples from the boreholes will be subjected to standard EPA Method 8240 analysis for volatile organic compounds, and EPA Method 418.1 for total petroleum hydrocarbons (Table 1). One sample per borehole will be collected for metals analysis using the California Title 22 TTLC and the STLC for nickel, copper and chromium VI.

Prior to purging the new well, a groundwater sample will be obtained for total petroleum hydrocarbon (TPH) analysis using EPA Method 418.1. The groundwater samples from the new well will be analyzed for volatile organic compounds using EPA Method 524.2.

If a 5-foot thick competent clay layer is encountered during drilling, a sample will be taken and drilling will stop. The soil sample will be preserved and handled as discussed previously. It will be subjected to several chemical and physical tests including EPA Method 8240, fine sieve analysis (sand) hydrometer test (silt and clay), and a falling head permeability test using the American Society of Testing and Materials (ASTM) D2434 method.

#### 8.0 REPORT PREPARATION

A clarifier and sump investigation report will be prepared to document the activities performed in this workplan. It will consist of a summary of field activities performed, laboratory analysis reports, borehole logs, well construction details, water quality parameter data, chain-of-custody forms, plot plan, and location map.

9.0 ESTIMATED SCHEDULE OF ACTIVITIES

The estimated schedule of activities is on Figure 4. It is estimated that approval of this workplan will require two weeks and that a well permit can be acquired from the Los Angeles County Department of Health Services in one week. The program is estimated to be complete in 8 to 10 weeks after approval of the workplan and receipt of permission to install the monitoring well.

This report submitted by:

Robert Zicker  
for Robert Zicker  
Associate Environmental Consultant

This report reviewed by:

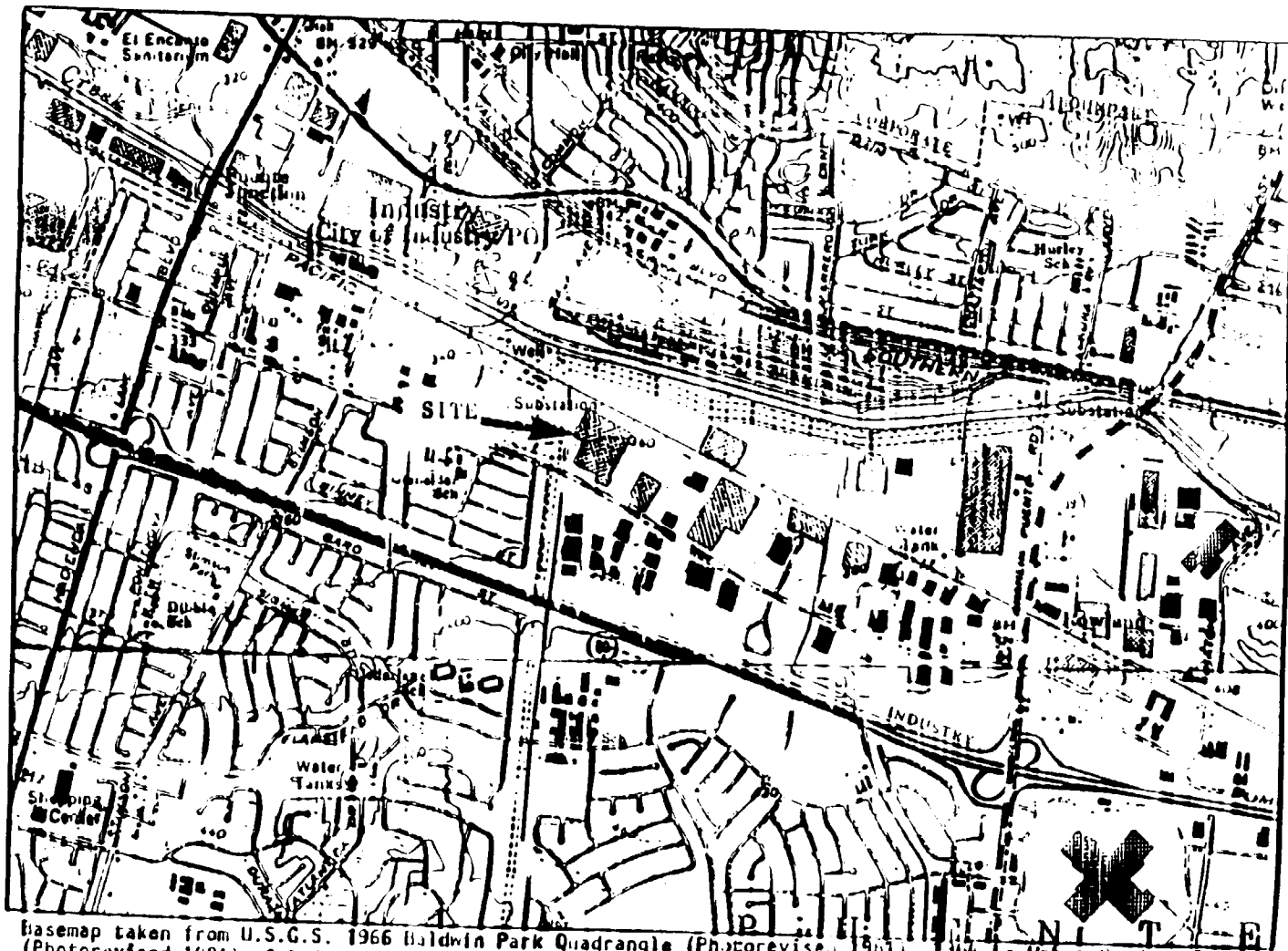
David Randell, R.G.  
David Randell, R.G.  
Supervisor Environmental Engineering  
Pacific Operations

December 20, 1990



TABLE 1  
PROPOSED LABORATORY ANALYSES

Area/ Task	EPA Or Other Test Method			
	8240	418.1	Metals	524.2
Clarifier				
Monitoring Well (1)				
Soil	7	7	1	NA
Water	NA	2	1	1
Boreholes (3)	21	21	3	NA
Sump				
Boreholes (3)				
Soil	21	21	3	NA
Clav	Sieve, hydrometer, falling head			



Basemap taken from U.S.G.S. 1966 Baldwin Park Quadrangle (Photorevised 1981), 1964 La Habra Quadrangle (Photorevised 1981), California 7.5 minute series (topographic).

0 .2 .4 mile

SCALE: 1 inch = .4 mile

**Clayton Environmental Consultants, Inc.**

SITE LOCATION AND TOPOGRAPHY

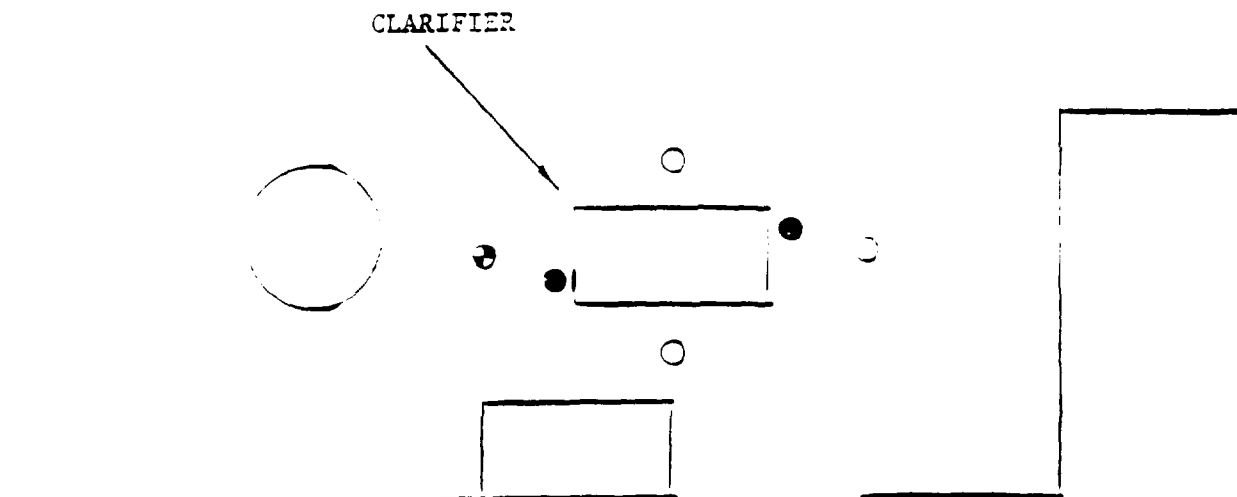
Stondy Company

Clayton Project No. 32065.00

Figure

1

12/90



- PREVIOUSLY DRILLED AND SAMPLED BOREHOLE LOCATIONS
- PROPOSED BOREHOLE LOCATION
- PROPOSED MONITORING WELL



SCALE



CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

FIGURE

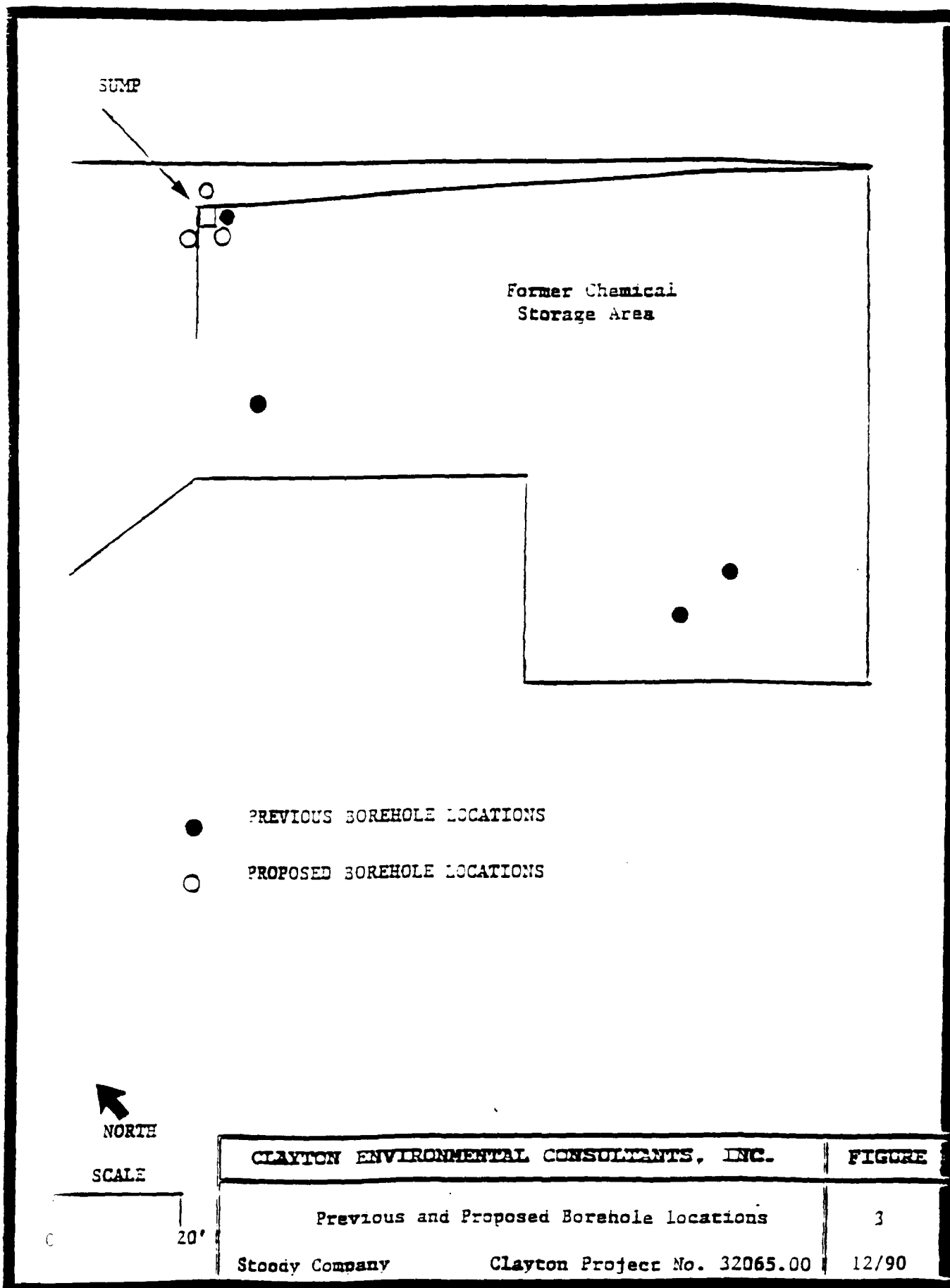
Previous and Proposed Borehole and Monitoring  
Well Locations.

2

Steady Company

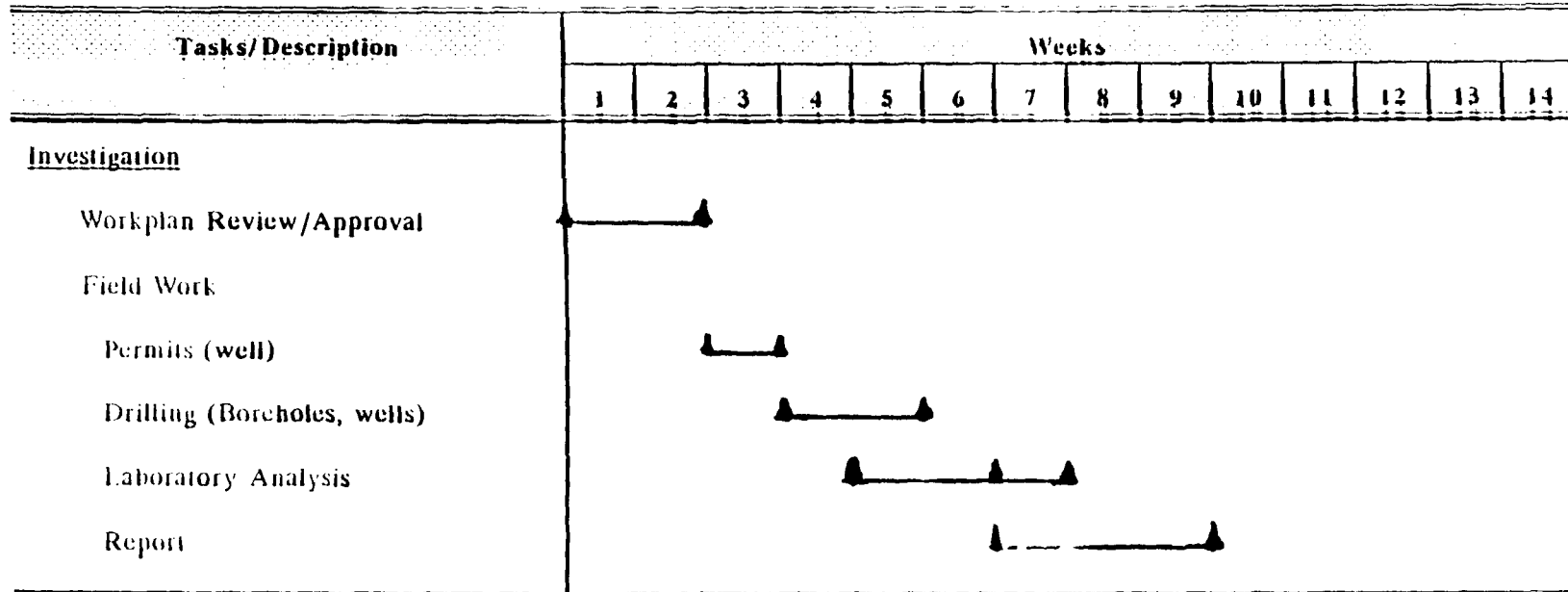
Clayton Project No. 32065.00

12/90



**FIGURE 4  
PROPOSED PROJECT TIME SCHEDULE**

**STOODY COMPANY SUMP AND CLARIFIER INVESTIGATION**



APPENDIX A  
CRWQCB CORRESPONDENCE  
DATED OCTOBER 22, 1990

STATE OF CALIFORNIA

GEORGE DEUKMEJIAN, Governor

# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD— LOS ANGELES REGION

101 Centre Plaza Drive  
Monterey Park, California 91754-2166  
(213) 266-7500



October 22, 1990

Ms. Nicole Jafari  
STOODY COMPANY  
P.O. Box 1901  
City of Industry, CA 91749-1901

## WORK PLAN DIRECTIVE (FILE NO. AB105.263)

Board staff is in receipt of your soil assessment and clarifier investigation report. Review of soil analyses, along with quarterly ground water monitoring results indicate waste disposal practices at your site have impacted local ground water. Further investigation and remediation of subsurface conditions is necessary:

1) Analyses of soil samples obtained adjacent to the sump located in the barrel storage area detected high concentrations of volatile organic compounds (VOCs) and total petroleum hydrocarbons (TPH). Analysis of Board split samples obtained from SB-1 detected the following compounds:

	1'	10'
t-1,2-DCE	393 $\mu\text{g/kg}$	ND
c-1,2-DCE	3500 "	126 $\mu\text{g/kg}$
TCE	147 "	ND
1,1,2-TCA	ND	37 $\mu\text{g/kg}$
PCE	100 $\mu\text{g/kg}$	907 "
Toluene	73 "	ND
Chlorobenzene	17 "	ND
MIK	100 "	ND
TPH	4875 $\text{mg/kg}$	----

2) Sludge and soil samples obtained adjacent to the clarifier also showed high levels of VOCs and TPH. It must be assumed that the clarifier inlet/outlet piping is not sound, and unpermitted discharge continues.

You are therefore directed to submit to this Board a work plan to further define the extent of soil and groundwater contamination at your facility. The work plan must meet the enclosed requirements (Attachments 1 and 2--INITIAL and SUPPLEMENTARY SUBSURFACE ENGINEERING/GEOLOGIC SOIL INVESTIGATION), with the following modifications:

Ms. Nicole Jafari  
Page Two

A. CLARIFIER AND SUMP INVESTIGATION/REMEDIATION

- 1) The clarifier must be emptied of all waste materials, steam cleaned, and inspected to determine where damaged. It must be either repaired, retro-fitted, or removed.
- 2) All underground pipework servicing the clarifier must be inspected to determine integrity. This may be conducted during excavation of contaminated soils.
- 3) All contaminated soils around the clarifier must be removed for disposal or remediation. Confirmatory sampling (sidewall and bottom) is required. Residual maximum concentrations of contaminants must meet the following criteria:
  - a) VOC levels must be less than ten times (10x's) State action levels or maximum contaminant levels (MCLs).
  - b) TPH levels must not exceed 10 ppm.
- 4) Obtain at least two soil samples for metals analyses. Analyze samples for soluble and total metal content for nickel, copper, and chromium VI.
- 5) Remediation/confirmation measures will be required adjacent to the sump located in the barrel storage area. Criteria for VOCs and TPH as stated in above section A.3. will apply.

B. ADDITIONAL GROUNDWATER INVESTIGATION REQUIREMENTS

- 1) One shallow groundwater monitoring well will be required. The well must be located immediately down-gradient of the clarifier.
- 2) Four inch diameter stainless steel well screens will be required. Use of PVC for casing material is acceptable.
- 3) Prior to purging of the new well, a ground water sample must be obtained for TPH analysis (EPA Method 418.1).
- 4) Continuation of the Stoddy ground water monitoring program is required. All previous monitoring program requirements as discussed in August 21, 1989 Board correspondence still apply, with the following changes:
  - a) Analyze groundwater for VOCs using EPA Methods 502.1/ 503.1, 502.2, or 524.2.




Ms. Nicole Jafari  
Page Three

- b) If TPH is detected in the initial sampling of the well located adjacent to the clarifier, subsequent samplings of the well will require analysis for TPH.
- c) The first monitoring/progress report will be required on January 2, 1991, with each successive reports due on the first of the month for each following quarter. An annual summary report will be due October 1, 1991.

Four copies of the work plan are due to Board staff by December 3, 1990. Please remember that the work plan should not be implemented until it has been approved by Board staff.

If you have any further questions, please contact Dainis Kleinbargs at (213)266-7530 and address all correspondence to his attention.



ROY R. SAKAIDA  
Senior Water Resource  
Control Engineer

RRS:dk

Enclosures

cc: Joe Viray, U.S. Environmental Protection Agency, Region 9  
Bill Jones, Los Angeles County, Department of Health  
Services  
Seiichi Saito, Los Angeles County, Department of Health  
Services, Environmental Management  
Leon Directo, Los Angeles County, Sanitation District  
Robert G. Berlien, Main San Gabriel Basin Watermaster  
Tom Statson, Statson Engineering, Engineer for Main San  
Gabriel Basin Watermaster  
Don Howard Engineering, Puente Basin Watermaster

1000

STATE OF CALIFORNIA  
California Regional Water Quality Control Board  
Los Angeles Region

WORKPLAN REQUIREMENTS  
for  
INITIAL SUBSURFACE ENGINEERING/GEOLOGIC SOIL INVESTIGATION  
(WELL INVESTIGATION PROGRAM)

The objective of this engineering/geological investigation is to evaluate potential waste discharges which may impact ground water. Your workplan should include, but not be limited to, the following:

**SITE INFORMATION:** Characterize past and present specific business activities. List any previous businesses at the site. Describe storage, handling, use, and disposal procedures for chemicals, primarily chlorinated organics or aromatic solvents. Give name, address, and phone number of any landlord/lessor.

**FACILITY MAP:** Identify on a scaled facility map all potential sources for contamination, past and present. Examples include: chemical and waste storage, transfer and use areas including tanks and piping, clarifiers, sumps, pits. Indicate dates of completion of buildings or pavings where possible.

**SITE SOILS AND GEOLOGY:** Determine if site discharges have entered the vadose zone, define sources, and provide background geological data for the area. Use EPA or State Department of Health Services guidelines.

1. Provide rationale for the number and location of borings. Plot on facility map.
2. Provide reasons for proposed depth of each boring if less than the generally required depth of 40 feet. Additional depths may be required if ground-water is encountered or if there is obvious contamination in the boring.
3. Identify proposed construction methods for borings.
4. Log all borings to provide characteristics of unconsolidated material per Unified Soil Classification System as well as all other appropriate information.
5. Provide a sampling plan to include equipment and procedures for collection and handling of geologic materials. A sampling interval of 5 feet, each change in lithology or changes in observed contamination is required starting at just below surface or surface covering.

6. Comply with chain of custody procedures. Discrete, undisturbed samples will be taken, sealed, and transported to the laboratory for analyses. Samples submitted for laboratory analyses are not to be used for field screening.
7. The proposed laboratory must be State Department of Health Services registered for each analytical procedure specified. EPA Methods 8260 or 8010/8020 are required. Supplement with Methods necessary for any site chemicals, past and present.
8. At a minimum, EPA sample holding times and conditions must be observed. However, samples held over seven (7) days may be suspect and not considered representative of site conditions.
9. EPA practical quantitation limits (5 to 10 µg/kg for selected VOC) are required. Analytical results must indicate detection limits and whether a chemical potentially exists (trace).
10. Minimum laboratory QA/QC requirements include: field and reagent blanks, calibration check standards, matrix spiked duplicates, total recoverables, laboratory quality control sample.

GROUNDWATER (HYDROGEOLOGY): Ground water must be sampled if any boring encounters a saturated zone. Site specific exceptions may be made in consultation with Board staff.

1. Provide a contingency plan for conversion of borings that encounter saturated zones to ground water sampling wells. This should include permitting and well design, construction, and development specifications.
2. Provide protocols for field analysis, water sampling, handling and transport.
3. EPA Methods 601/602 or appropriate 500 Series Methods must be used plus any appropriate EPA Methods for nitrates and any other chemicals used on site.

ADDITIONAL REQUIREMENTS:

1. Submit a copy of the results of any previous subsurface investigations conducted at the site.
2. Submit a time schedule. The proposed activities must be completed within 6 to 8 weeks of plan approval.
3. A CALIFORNIA REGISTERED GEOLOGIST OR ENGINEER OR CERTIFIED ENGINEERING GEOLOGIST WITH FIVE YEARS SOILS OR HYDROGEOLOGIC EXPERIENCE SHALL DIRECTLY OVERSEE OR CONDUCT THESE INVESTIGATIONS AND PROPERLY SIGN OFF THE FINAL REPORT FOR THE REPORT TO BE ACCEPTED AND APPROVED.
4. Work shall not proceed without prior approval. Staff is to be notified at least one week prior to initiating field work to permit observation of field activities and to take split or duplicate samples.

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LOS ANGELES REGION**

**SUPPLEMENTARY ENGINEERING/GEOLOGIC SUBSURFACE INVESTIGATION  
(WELL INVESTIGATION PROGRAM)**

**DATA REQUIREMENTS:** All requirements in the WORK PLAN REQUIREMENTS for INITIAL SUBSURFACE INVESTIGATIONS must be met in conducting this additional investigation.

**UNSATURATED ZONE (SOILS)**

1. Ascertain lateral and vertical extent of contamination.
2. Determine soil properties which affect contaminant mobility in the vadose zone. Relate the specific residual contaminants with their potential long term effect on groundwater quality.

**SATURATED ZONE (WATER)**

1. Determine specific aquifer properties for correct siting of monitoring well(s). Use of piezometer clusters is encouraged to ascertain aquifer properties.
2. Determine lateral and vertical extent of contaminant plume.

**PROCEDURES**

**SOIL BORING**

1. Justify and plot location(s) for soil sampling.
2. Explain sampling depth and drilling method.
3. Have an appropriately registered or certified personnel sign off boring logs.

**DRILLING/SOIL SAMPLING**

1. Describe sampling procedures:
  - o Method and equipment used to collect the samples with minimal loss of volatiles.
  - o Sampling interval (5 feet or at significant changes in soil/lithology as noted on the boring logs).
  - o Number and type of soil samples (only discrete, undisturbed samples are acceptable).
2. Sample water from any boring which penetrates a saturated zone after converting to a monitoring well or piezometer.

**MONITORING WELL CONSTRUCTION/DEVELOPMENT**

1. Include in the well design, specifications and construction details such as:
  - o Casing and screen materials, screen length and placement with respect to water table etc.,
  - o Proposed depth and type of annular seal,
  - o Time for cement to set before commencing development.
2. Provide for appropriate logging by qualified personnel.
3. Characterize aquifer materials for proper selection of filter pack and screen. Only commercially slotted screens are acceptable. Less than 10-20% of the filter pack should enter the well.

4. The boring should not penetrate a competent clay layer below the saturated zone.
5. Casing must be suspended and centralized such that it is not resting against the sides nor bottom of the hole prior to fixing in place.
6. Place grout of either cement or cement/bentonite in an appropriate manner to avoid bridging.
7. Establish benchmarks relative to mean sea level. Provide benchmark location and survey date. Measure water levels to 0.01 foot. Also provide well location using UTM Coordinates.
8. Describe methods to develop well such that the waters sampled are representative of the formation water. The water sampled must have less than 10 ppm settleable solids.

#### WATER SAMPLING

1. Describe details of sample collection:
  - o Water sampling devices to be used,
  - o Procedures to minimize loss of samples by adsorption and/or volatilization,
  - o Purge techniques, tests (temp., pH, conductivity) to assure the collection of a representative water sample.
2. Describe methods for handling the samples collected.

#### SAMPLE ANALYSES

##### GENERAL

1. The laboratory must be certified by the California Department of Health Services for the specific required procedures.
2. Laboratory procedures must be specified and QA/QC sheets must be submitted with the results in the technical report.
3. Limits of detection must meet EPA's practical quantitation limits.
4. Proper chain of custody procedures must be used.

**SOILS:** Specify EPA Methods to determine existing facility contaminants, also use the required EPA Methods 8260 or 8010/8020 to quantify volatile organics to EPA's practical quantitation limits. Specify detection limits.

**WATER:** Specify EPA Methods to quantify contaminants found in soil, also use EPA Methods 502.1/503.1, 502.2 or 524.2. Specify detection limits. Submit samples to the laboratory in unfiltered form and report sample turbidity.

##### REPORTS

Four copies of final reports should be submitted with all information requested.

APPENDIX B

SUBSURFACE SOIL INVESTIGATION  
AND  
INDUSTRIAL CLARIFIER REPORT  
FEBRUARY 28, 1990

February 27, 1990

Clayton Project No. 27454.00

Ms. Nicole Jafari  
STOODY COMPANY  
16425 Gale Avenue  
City of Industry, CA 91745

Subject: Subsurface Soil Investigation and Industrial Clarifier Report

Dear Ms. Jafari:

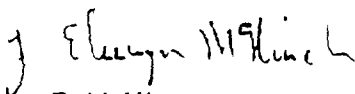
The enclosed report details the activities and results of the subsurface soil and clarifier investigation conducted at the Stooddy facility on January 18 and 19, 1990.

No recommendations were made in the report text. As requested by Stooddy, no conclusions were made from the laboratory results. Further interpretation and direction has been left to the California Regional Water Quality Control Board (CRWQCB). However, the CRWQCB is likely to request additional investigations.

As shown in the laboratory results section, various chemical compounds were detected in the soil at both the chemical barrel storage area and the industrial clarifier. Also, many of these compounds were detected at significant levels from the deepest samples (10 to 10.5 feet). This leaves the vertical extent of these compounds undefined in which case the CRWQCB will probably request additional and deeper boreholes, soil sampling, and possibly groundwater monitoring wells. The goal will be to define the vertical and lateral extent of these compounds. A clear understanding of this is necessary before recommendations can be made as to an appropriate remedial action (if any).

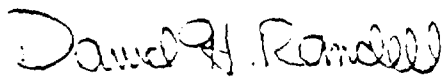
If you have any questions, please feel free to call me at (714) 229-4806.

Sincerely,

  
Jesse E. McNinch  
Associate Geologist

JEM/hly

Reviewed by:

  
David H. Randell, R.G.  
Supervisor, Environmental Engineering  
Pacific Operations

cc: Dr. Jaswant Singh, Clayton

**Clayton Environmental Consultants, Inc.**

P.O. Box 788 • 5736 Corporate Avenue • Cypress, California 90630 • (714) 229-4806

Subsurface Soil Investigation  
and  
Industrial Clarifier Report  
for  
Stoody Company  
Industry, California

Clayton Project No. 27454.00  
February 28, 1990



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- 2 SUMMARY OF ANALYTICAL RESULTS FROM SOIL SAMPLES TAKEN NEAR THE INDUSTRIAL CLARIFIER AND ITS LIQUID AND SLUDGE CONSTITUENTS
- 3 SUMMARY OF INORGANIC ANALYSES FROM THE INDUSTRIAL CLARIFIER SLUDGE

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- A CRWQCB CORRESPONDENCE
- B INDUSTRIAL CLARIFIER AS-BUILT DRAWING
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## EXECUTIVE SUMMARY

Clayton Environmental Consultants, Inc. was retained by the Stooddy Company to develop and implement a subsurface soil and industrial clarifier investigation at their facility located at 16425 Gale Avenue in Industry, California. Two general areas were investigated at the Stooddy Company facility on January 18 and 19, 1990. Three boreholes were drilled to a depth of 10 feet beneath the chemical waste barrel storage area and sampled at intervals of 1, 5, and 10 feet below ground surface. Two boreholes were drilled and sampled at 6.5 and 10.5 feet below ground surface adjacent to the industrial clarifier, and liquid and sludge samples were obtained from first stage of the clarifier.

Soil samples obtained from the chemical waste barrel storage area were analyzed for volatile organics using EPA Method 8240. Soil samples obtained near inlet and outlet piping of the clarifier were analyzed by EPA Method 8240 and 8015. The clarifier sludge was analyzed using a variety of tests including EPA Methods 8240 and 8015, flashpoint, pH, and California Title 22 metals. The clarifier liquid was analyzed for volatile organic compounds via EPA Method 624.

Laboratory analyses from soil samples taken from beneath the chemical waste barrel storage area report five volatile organic compounds detected above the detection limit.

Laboratory analyses from soil samples taken near the inlet and outlet piping of the clarifier reveal eight volatile organic compounds detected above the detection limit. The two organic volatile compounds reported within the clarifier (liquid and sludge) were also detected in the soil samples. In addition, waste oil was reported in both the clarifier sludge and the adjacent soil.

Visual inspection of the clarifier was performed following the removal of the contents and rinsing by the Nottingham Company of Southern California. The concrete interior appeared in good condition with no visible cracks.

Laboratory analysis of the clarifier sludge samples reported two detected volatile organic compounds and petroleum hydrocarbons. Various metals were detected, but none above total threshold limit concentrations (TTLC).

Subsurface Soil Investigation  
and  
Industrial Clarifier Report  
for  
Stoody Company  
Industry, California

Clayton Project No. 27454.00  
February 28, 1990

**Clayton Environmental Consultants, Inc.**

P.O. Box 788 • 5736 Corporate Avenue • Cypress, California 90630 • (714) 229-4806

**1.0 INTRODUCTION**

The Stoody Company (Stoody), a Division of Stoody Deloro Stellite, Inc., is located at 16425 Gale Avenue in Industry, California. Stoody is a manufacturer of welding consumables (welding rods and wires) and specializes in die-cast, wear-resistant alloy parts. Stoody began operations on the site in 1976. Prior to that time, the area was used as farmland. Figure 1 shows the location of the Stoody facility.

In January 1990, Clayton Environmental Consultants, Inc. was retained by Stoody to sample from and visually inspect the industrial clarifier, and to assess subsurface soil conditions adjacent to the clarifier and in the chemical barrel storage area. Both tasks were designed to meet the requirements of the California Regional Water Quality Control Board, Los Angeles Region (CRWQCB) as outlined in their October 6, 1989 letter (File No. AB105.263) addressed to Mr. Hal Kahlen of Stoody (Appendix A).

On December 22, 1989 Clayton obtained approval of the vadose zone (subsurface) investigation and clarifier inspection workplan from Mr. Roy Sakaida of the CRWQCB (Appendix A). On January 18, and 19, 1990, Clayton conducted the field work as prescribed in the workplan dated November 16, 1989. The Nottingham Company of Southern California was contracted by the Stoody Company to remove and dispose of the contents of the clarifier as well as clean the clarifier interior. This report provides a description of field activities and laboratory analytical results from samples collected during that investigation.

**2.0 OBJECTIVE**

As outlined in CRWQCB correspondence, the first objective of the subsurface soil investigation was to examine the soil conditions near the industrial clarifier and at the chemical waste barrel storage area. The second objective was to sample the liquid and sludge contents of the clarifier and to assess its containment integrity through visual inspection of the interior and by analyzing soil samples from boreholes located adjacent to the clarifier.

The two areas of concern investigated during the field operations are shown in Figure 2 and are described as follows:

#### Chemical waste barrel storage area:

Asphalt-paved area in the northeast corner of the facility where barrels (55-gallon drums) containing waste oils and solvents used to be stored. Staining was noted by CRWQCB personnel on the asphalt beneath and adjacent to the barrels. In July, 1988, three boreholes were drilled in this area with one located in the drainage sump. Following the drilling and sampling, the drainage sump, which previously had an asphalt bottom, was filled with concrete.

#### Industrial Waste Clarifier:

Located outside, approximately 10 feet from the northeast corner of the building (Figure 2). As-built diagrams of the clarifier are provided in Appendix B. The floor and the interior walls are concrete. Effluent from the facility is carried to the clarifier through one main, buried pipe (approximately 6 inches in diameter) and two, surface PVC conduits which empty through holes in the metal cover.

### 3.0 FIELD ACTIVITIES

#### 3.1 CHEMICAL WASTE BARREL STORAGE AREA

On January 18, 1990, a total of three soil boreholes were drilled at the site (SB-1, -2, and -3). These boreholes were located adjacent to the three boreholes drilled on July 21, 1988 (Figure 2). Present at the site during much of the field work were Ms. Nicole Jafari of Stoddy and Mr. Dainis Kleinbergs from the CRWQCB.

The boreholes were vertically drilled using a 3-inch outside-diameter, stainless-steel hand auger. Driven soil samples were collected with a 1-1/2-inch diameter hand driven slide hammer at 1, 5, and 10-foot intervals. Brass tubes (1-1/2-inch by 6-inch) were used to collect each sample. The workplan (October 16, 1989 Project Number 26496.00) originally called for use of a modified California split-barrel sampler with 6-inch, 2.5-inch outside diameter brass tubes, but because of the shallow sampling depth and the ability to acquire relatively undisturbed samples, and the proximity of the sampling to underground piping, the slide hammer was employed. Immediately after sampling, the brass sample tubes were removed from the slide hammer sampler. Considerable effort was exerted to minimize sample headspace within the brass cylinders. Aluminum foil was pressed into the end of the brass tubes, when the soil was not flush with the cylinder edge.

The ends of the tubes were covered with aluminum foil and polyethylene caps. The caps were sealed to each end of the cylinder with Scotch 33+ electrical tape. Samples were then labeled, placed in self-sealing plastic bags, and stored under Blue-Ice™ in a portable ice chest for delivery to Clayton's state-certified laboratory, following standard chain-of-custody procedures. Additional duplicate samples were collected at the request of Mr. Dainis Kleinbergs for CRWQCB purposes, in the same manner described above.

The stainless steel hand auger and the slide hammer head were washed in a trisodium phosphate solution, rinsed twice in tap water, and then rinsed in deionized water between the collection

of each sample.

Prior to collecting each sample, soil from the hand auger (taken from just above the sample depth) was placed in a self-sealing plastic bag and allowed to volatilize. These bagged samples were subjected to field headspace analysis via the use of a photoionization detector (PID) after being allowed to volatilize for at least 20 minutes. Soil cuttings from the hand auger were also used by a Clayton geologist to log each borehole. Results of the PID analyses are included on the borehole logs (Appendix C).

When the soil sampling was completed, each borehole was re-filled with their respective soil cuttings and capped with cement. No obvious soil discoloration or odors were noted in the soil cuttings.

### **3.2 INDUSTRIAL WASTE CLARIFIER**

#### **3.2.1 Sludge and Liquid Sample Collection**

On January 19, 1990, Clayton field personnel collected samples of the sludge and liquid contained in the industrial clarifier. A Los Angeles County Sanitation District (LACSD) inspector was onsite during the liquid sample collection. Also present were Mr. Dainis Kleinbergs and Ms. Nicole Jafari. The liquid sample was obtained from the first stage of the clarifier near the inlet pipe using a pre-cleaned LACSD stainless steel pail, and placed in two glass 40-milliliter VOA bottles with Teflon™-lined lids. Nottingham Company then pumped the liquid out of the clarifier, exposing the bottom sludge. The sludge sample was obtained from the first stage with a pre-cleaned half-liter glass jar by taping the jar to a metal rod and dipping up a sample from near the clarifier bottom. The sludge was then poured into four, half-liter glass jars and sealed with Teflon™-lined lids. The samples were labeled and wrapped with styrofoam™ sheeting to minimize the potential for damage during shipping. They were then placed under Blue-Ice™ in a portable cooler for delivery to Clayton's state-certified laboratory, following standard chain-of-custody procedures.

#### **3.2.2 Visual Inspection**

Following sampling and removal of the clarifier contents, the clarifier was cleaned, using water and a high-pressure hose. The cleaning and visual inspection were performed from the surface opening. No attempt was made to enter the clarifier. The walls and all the joints between each side and the bottom appeared smooth and in good condition. The bottom in the first and second stage was smooth with no cracks or scaling evident. No cracks were observed on the bottom of the third stage but it was noted that the surface was rough in certain areas, appearing as if a tar-like substance had hardened to the surface.

#### **3.2.3 Soil Sampling**

On January 19, 1990, following the clarifier inspection, two boreholes were drilled to a depth of 10.5 feet. One was located adjacent to the inlet piping (SB-5) and the other next to the outlet piping (SB-4). The boreholes were vertically drilled using a 3-inch outside diameter stainless steel hand auger. Driven soil samples were collected with a 1-1/2-inch hand-driven slide hammer at depths of 6.5 and 10.5 feet. Brass cylinders (1-1/2-inch by 6-inch) were used to collect each sample. The workplan (October 16, 1989 Project Number

26496.00) described a method of hand augering and simply transferring the soil from the hand auger cylinder to 6-inch, 2.5-inch outside diameter brass tubes. However, the slide hammer was used to minimize the loss of volatile constituents. After the sample collection, the ends of the tubes were covered with aluminum foil and polyethylene caps. The caps were sealed to each end of the cylinder with Scotch 33+ electrical tape. Samples were then labeled, placed in a self-sealing plastic bag, and stored under Blue-Ice™ in a portable ice chest for delivery to Clayton's state-certified laboratory, following standard chain-of-custody procedures.

Prior to collecting each sample, soil (taken from just above the sample depth) from the hand auger was placed in a self-sealing plastic bag and allowed to volatilize. These bagged samples were subjected to field headspace analysis via the use of a photoionization detector (PID) after being allowed to volatilize for a least 20 minutes. Volatile organic compounds were detected by headspace analysis using the PID at 10.5 feet below ground surface at SB-4 and SB-5. Results of the PID analyses are indicated on the borehole logs (Appendix C). Soil cuttings from the hand auger were also used by a Clayton geologist to log each borehole. When the sampling was completed, each borehole was partially re-filled with their respective cuttings (that showed no detection from the PID and were not obviously discolored) and capped with cement.

#### 4.0 LABORATORY ANALYSIS

Laboratory analytical methods were dictated by the CRWQCB in the aforementioned October 6, 1989 letter to Stoddy. Soil samples obtained from the chemical waste barrel storage area were analyzed for volatile organics using U.S. Environmental Protection Agency (EPA) Method 8240. These samples were shipped to Clayton's state-certified laboratory located in Pleasanton, California. The chain-of-custody form and laboratory analysis reports are included in Appendix D.

Analyses associated with the industrial clarifier are as follows:

The clarifier sludge was analyzed for volatile organic compounds and petroleum hydrocarbons using EPA Method 8240 and 8015, respectively, and flash point, pH, and California Title 22 metals. The clarifier liquid was analyzed for volatile organic compounds via EPA Method 624.

Samples from the adjacent soil boreholes were analyzed for both volatile organic compounds and petroleum hydrocarbons using EPA Methods 8240 and 8015, respectively. EPA Method 8015 was extended or modified to identify the heavier hydrocarbons (diesel, waste oil) in both the clarifier sludge and the adjacent soil samples. These samples were also shipped to Clayton's state-certified laboratory in Pleasanton, California. The soil samples were analyzed within 7 days of sampling as requested by the CRWQCB. Chain-of-custody forms and laboratory analysis reports are included in Appendix D. Also, as requested by CRWQCB, the chromatograms for total petroleum hydrocarbons by EPA 8015 are enclosed in Appendix E.

#### 4.1 CHEMICAL WASTE BARREL STORAGE AREA: SOIL SAMPLES

Three boreholes (SB-1, SB-2, SB-3) were drilled to characterize the soil conditions in the chemical waste barrel storage area. Samples were collected from 1, 5, and 10 feet below ground surface. Tetrachloroethene was detected in samples from the three boreholes at

concentrations ranging from 160 to 8 micrograms per kilogram (ug/kg) and showed a trend of decreasing with increased depth. Trans-1,2-dichloroethene was detected in SB-1 and ranged in concentrations from 700 to 14 ug/kg, with a similar trend of decreasing with depth. Trichloroethene (5 ug/kg) was also detected in SB-1 at the 10-foot sampling interval. Toluene and benzene were measured at 4 ug/kg and 2 ug/kg, respectively in SB-3 at the 10-foot sampling depth. These results are summarized in Table 1.

#### 4.2 INDUSTRIAL WASTE CLARIFIER: LIQUID AND SLUDGE SAMPLES

Toluene was detected at 640 milligram per liter (mg/l) from the liquid sample taken from the first stage of the clarifier. In addition, 0.8 mg/kg trans-1,2-dichloroethene, 5.0 mg/kg toluene, 1,000 mg/kg diesel, and 8,000 mg/kg waste oil were reported in the sludge. Laboratory results of organic compounds are shown in Table 2. The sludge pH was measured at 7.6, and the ignitability was greater than 200 degrees Fahrenheit. Inorganic constituents detected above the detection limits in the clarifier sludge are as follows: arsenic, barium, cadmium, chromium, cobalt, copper, mercury, molybdenum, nickel, silver, vanadium, and zinc. The concentrations of the inorganic constituents measured from the clarifier sludge samples are summarized in Table 3.

#### 4.3 INDUSTRIAL WASTE CLARIFIER: SOIL SAMPLES

Boreholes SB-4 and SB-5 were drilled to characterize the soil conditions immediately beneath the clarifier outlet and inlet piping, respectively. Samples were taken at approximately 1 and 5 feet below the inlet and outlet piping at 6.5 and 10.5 feet below ground surface. The following compounds were detected in both boreholes: tetrachloroethene, toluene, trichloroethene, ethylbenzene, total xylenes, and acetone. 2-Butanone and trans-1,2-dichloroethene were only detected at SB-5. Samples from SB-4 reveal 150 milligrams per kilogram (mg/kg) of waste oil 1 foot below the outlet piping, and 3,700 mg/kg of waste oil 5 feet beneath the outlet piping. Samples beneath the inlet piping (SB-5) report 1,000 mg/kg and 5,000 mg/kg of waste oil at 6.5 and 10.5 feet below ground surface, respectively. The concentrations and distribution of the detected compounds are shown in Table 2.

### 5.0 CONCLUSIONS

Three soil boreholes were drilled in the chemical barrel storage area to a depth of 10 feet below ground surface. Soil samples were collected from each borehole and subjected to laboratory analysis using EPA Method 8240. Five volatile organic compounds were detected. The two chemical compounds which were measured at the highest concentration (tetrachloroethene, trans-1,2-dichloroethene) decreased with depth.

Two soil boreholes were drilled adjacent to the industrial clarifier, beneath the inlet and outlet piping, to a depth of 10.5 feet below ground surface. Soil samples were obtained from each borehole and subjected to laboratory analysis using EPA Method 8240 and 8015 modified. Eight volatile organic compounds were detected from EPA Method 8240. Waste oil was detected from EPA Method 8015 modified in both boreholes.

One liquid and one sludge sample was collected from the first stage of the clarifier before cleaning by the Nottingham Company. A variety of laboratory analyses were performed on the clarifier sludge in order to determine if it was hazardous waste. Total threshold limit

concentrations established in California Title 22 regulations were not exceeded by any of the 18 tested metals. The corrosivity and ignitability of the sludge were addressed by pH and flash point, respectively, and found to be within established limits (California Title 22).

Laboratory analysis using EPA Methods 8240 and 8015 modified on the contents of the clarifier (liquid and sludge) and the adjacent soil both report the detection of three compounds, trans-1,2-dichloroethene, toluene, and waste oil.

The visual inspection of the clarifier interior revealed no obvious points of leakage and appeared in relatively good condition.

This report submitted by:

Jesse McNinch  
Associate Geologist

This report approved by:

David H. Randell  
David H. Randell  
Registered Geologist, No. 3977  
Supervisor, Environmental Engineering  
Pacific Operations

February 13, 1990



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD—  
LOS ANGELES REGION

101 Centre Plaza Drive  
Monterey Park, California 91754-2136  
(213) 266-7500



October 22, 1990

Ms. Nicole Jafari  
STOODY COMPANY  
P.O. Box 1901  
City of Industry, CA 91749-1901

WORK PLAN DIRECTIVE (FILE NO. AB105.263)

Board staff is in receipt of your soil assessment and clarifier investigation report. Review of soil analyses, along with quarterly ground water monitoring results indicate waste disposal practices at your site have impacted local ground water. Further investigation and remediation of subsurface conditions is necessary:

1) Analyses of soil samples obtained adjacent to the sump located in the barrel storage area detected high concentrations of volatile organic compounds (VOCs) and total petroleum hydrocarbons (TPH). Analysis of Board split samples obtained from SB-1 detected the following compounds:

	1'	10'
t-1,2-DCE	393 $\mu\text{g/kg}$	ND
c-1,2-DCE	3500 "	126 $\mu\text{g/kg}$
TCE	147 "	ND
1,1,2-TCA	ND	37 $\mu\text{g/kg}$
PCE	100 $\mu\text{g/kg}$	907 "
Toluene	73 "	ND
Chlorobenzene	17 "	ND
MIK	100 "	ND
TPH	4875 $\text{mg/kg}$	----

2) Sludge and soil samples obtained adjacent to the clarifier also showed high levels of VOCs and TPH. It must be assumed that the clarifier inlet/outlet piping is not sound, and unpermitted discharge continues.

You are therefore directed to submit to this Board a work plan to further define the extent of soil and groundwater contamination at your facility. The work plan must meet the enclosed requirements (Attachments 1 and 2--INITIAL and SUPPLEMENTARY SUBSURFACE ENGINEERING/GEOLOGIC SOIL INVESTIGATION), with the following modifications:

A. CLARIFIER AND SUMP INVESTIGATION/REMEDIATION

- 1) The clarifier must be emptied of all waste materials, steam cleaned, and inspected to determine where damaged. It must be either repaired, retro-fitted, or removed.
- 2) All underground pipework servicing the clarifier must be inspected to determine integrity. This may be conducted during excavation of contaminated soils.
- 3) All contaminated soils around the clarifier must be removed for disposal or remediation. Confirmatory sampling (sidewall and bottom) is required. Residual maximum concentrations of contaminants must meet the following criteria:
  - a) VOC levels must be less than ten times (10x's) State action levels or maximum contaminant levels (MCLs).
  - b) TPH levels must not exceed 10 ppm.
- 4) Obtain at least two soil samples for metals analyses. Analyze samples for soluble and total metal content for nickel, copper, and chromium VI.
- 5) Remediation/confirmation measures will be required adjacent to the sump located in the barrel storage area. Criteria for VOCs and TPH as stated in above section A.3. will apply.

B. ADDITIONAL GROUNDWATER INVESTIGATION REQUIREMENTS

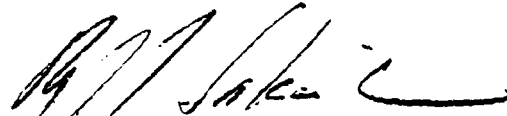
- 1) One shallow groundwater monitoring well will be required. The well must be located immediately down-gradient of the clarifier.
- 2) Four inch diameter stainless steel well screens will be required. Use of PVC for casing material is acceptable.
- 3) Prior to purging of the new well, a ground water sample must be obtained for TPH analysis (EPA Method 418.1).
- 4) Continuation of the Steady ground water monitoring program is required. All previous monitoring program requirements as discussed in August 21, 1989 Board correspondence still apply, with the following changes:
  - a) Analyze groundwater for VOCs using EPA Methods 502.1/ 503.1, 502.2, or 524.2.

Ms. Nicole Jafari  
Page Three

- b) If TPH is detected in the initial sampling of the well located adjacent to the clarifier, subsequent samplings of the well will require analysis for TPH.
- c) The first monitoring/progress report will be required on January 2, 1991, with each successive reports due on the first of the month for each following quarter. An annual summary report will be due October 1, 1991.

Four copies of the work plan are due to Board staff by December 3, 1990. Please remember that the work plan should not be implemented until it has been approved by Board staff.

If you have any further questions, please contact Dainis Kleinbergs at (213)266-7530 and address all correspondence to his attention.



ROY R. SAKAIDA  
Senior Water Resource  
Control Engineer

RRS:dk

Enclosures

cc: Joe Viray, U.S. Environmental Protection Agency, Region 9  
Bill Jones, Los Angeles County, Department of Health  
Services  
Seiichi Saito, Los Angeles County, Department of Health  
Services, Environmental Management  
Leon Directo, Los Angeles County, Sanitation District  
Robert G. Berlian, Main San Gabriel Basin Watermaster  
Tom Statson, Statson Engineering, Engineer for Main San  
Gabriel Basin Watermaster  
Don Howard Engineering, Puente Basin Watermaster

STATE OF CALIFORNIA  
California Regional Water Quality Control Board  
Los Angeles Region

WORKPLAN REQUIREMENTS  
for  
INITIAL SUBSURFACE ENGINEERING/GEOLOGIC SOIL INVESTIGATION  
(WELL INVESTIGATION PROGRAM)

The objective of this engineering/geological investigation is to evaluate potential waste discharges which may impact ground water. Your workplan should include, but not be limited to, the following:

**SITE INFORMATION:** Characterize past and present specific business activities. List any previous businesses at the site. Describe storage, handling, use, and disposal procedures for chemicals, primarily chlorinated organics or aromatic solvents. Give name, address, and phone number of any landlord/lessor.

**FACILITY MAP:** Identify on a scaled facility map all potential sources for contamination, past and present. Examples include: chemical and waste storage, transfer and use areas including tanks and piping, clarifiers, sumps, pits. Indicate dates of completion of buildings or pavings where possible.

**SITE SOILS AND GEOLOGY:** Determine if site discharges have entered the vadose zone, define sources, and provide background geological data for the area. Use EPA or State Department of Health Services guidelines.

1. Provide rationale for the number and location of borings. Plot on facility map.
2. Provide reasons for proposed depth of each boring if less than the generally required depth of 40 feet. Additional depths may be required if ground-water is encountered or if there is obvious contamination in the boring.
3. Identify proposed construction methods for borings.
4. Log all borings to provide characteristics of unconsolidated material per Unified Soil Classification System as well as all other appropriate information.
5. Provide a sampling plan to include equipment and procedures for collection and handling of geologic materials. A sampling interval of 5 feet, each change in lithology or changes in observed contamination is required starting at just below surface or surface covering.

6. Comply with chain of custody procedures. Discrete, undisturbed samples will be taken, sealed, and transported to the laboratory for analyses. Samples submitted for laboratory analyses are not to be used for field screening.
7. The proposed laboratory must be State Department of Health Services registered for each analytical procedure specified. EPA Methods 8260 or 8010/8020 are required. Supplement with Methods necessary for any site chemicals, past and present.
8. At a minimum, EPA sample holding times and conditions must be observed. However, samples held over seven (7) days may be suspect and not considered representative of site conditions.
9. EPA practical quantitation limits (5 to 10  $\mu\text{g/kg}$  for selected VOC) are required. Analytical results must indicate detection limits and whether a chemical potentially exists (trace).
10. Minimum laboratory QA/QC requirements include: field and reagent blanks, calibration check standards, matrix spiked duplicates, total recoverables, laboratory quality control sample.

GROUNDWATER (HYDROGEOLOGY): Ground water must be sampled if any boring encounters a saturated zone. Site specific exceptions may be made in consultation with Board staff.

1. Provide a contingency plan for conversion of borings that encounter saturated zones to ground water sampling wells. This should include permitting and well design, construction, and development specifications.
2. Provide protocols for field analysis, water sampling, handling and transport.
3. EPA Methods 601/602 or appropriate 500 Series Methods must be used plus any appropriate EPA Methods for nitrates and any other chemicals used on site.

ADDITIONAL REQUIREMENTS:

1. Submit a copy of the results of any previous subsurface investigations conducted at the site.
2. Submit a time schedule. The proposed activities must be completed within 6 to 8 weeks of plan approval.
3. A CALIFORNIA REGISTERED GEOLOGIST OR ENGINEER OR CERTIFIED ENGINEERING GEOLOGIST WITH FIVE YEARS SOILS OR HYDROGEOLOGIC EXPERIENCE SHALL DIRECTLY OVERSEE OR CONDUCT THESE INVESTIGATIONS AND PROPERLY SIGN OFF THE FINAL REPORT FOR THE REPORT TO BE ACCEPTED AND APPROVED.
4. Work shall not proceed without prior approval. Staff is to be notified at least one week prior to initiating field work to permit observation of field activities and to take split or duplicate samples.

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD**  
**LOS ANGELES REGION**

**SUPPLEMENTARY ENGINEERING/GEOLOGIC SUBSURFACE INVESTIGATION**  
**(WELL INVESTIGATION PROGRAM)**

**DATA REQUIREMENTS:** All requirements in the WORK PLAN REQUIREMENTS for INITIAL SUBSURFACE INVESTIGATIONS must be met in conducting this additional investigation.

**UNSATURATED ZONE (SOILS)**

1. Ascertain lateral and vertical extent of contamination.
2. Determine soil properties which affect contaminant mobility in the vadose zone. Relate the specific residual contaminants with their potential long term effect on ground water quality.

**SATURATED ZONE (WATER)**

1. Determine specific aquifer properties for correct siting of monitoring well(s). Use of piezometer clusters is encouraged to ascertain aquifer properties.
2. Determine lateral and vertical extent of contaminant plume.

**PROCEDURES**

**SOIL BORING**

1. Justify and plot location(s) for soil sampling.
2. Explain sampling depth and drilling method.
3. Have an appropriately registered or certified personnel sign off boring logs.

**DRILLING/SOIL SAMPLING**

1. Describe sampling procedures:
  - o Method and equipment used to collect the samples with minimal loss of volatiles.
  - o Sampling interval (5 feet or at significant changes in soil/lithology as noted on the boring logs).
  - o Number and type of soil samples (only discrete, undisturbed samples are acceptable).
2. Sample water from any boring which penetrates a saturated zone after converting to a monitoring well or piezometer.

**MONITORING WELL CONSTRUCTION/DEVELOPMENT**

1. Include in the well design, specifications and construction details such as:
  - o Casing and screen materials, screen length and placement with respect to water table etc.,
  - o Proposed depth and type of annular seal,
  - o Time for cement to set before commencing development.
2. Provide for appropriate logging by qualified personnel.
3. Characterize aquifer materials for proper selection of filter pack and screen. Only commercially slotted screens are acceptable. Less than 10-20% of the filter pack should enter the well.

4. The boring should not penetrate a competent clay layer below the saturated zone.
5. Casing must be suspended and centralized such that it is not resting against the sides nor bottom of the hole prior to fixing in place.
6. Place grout of either cement or cement/bentonite in an appropriate manner to avoid bridging.
7. Establish benchmarks relative to mean sea level. Provide benchmark location and survey data. Measure water levels to 0.01 foot. Also provide well location using UTM Coordinates.
8. Describe methods to develop well such that the waters sampled are representative of the formation water. The water sampled must have less than 10 ppm settleable solids.

#### WATER SAMPLING

1. Describe details of sample collection:
  - o Water sampling devices to be used,
  - o Procedures to minimize loss of samples by adsorption and/or volatilization,
  - o Purge techniques, tests (temp., pH, conductivity) to assure the collection of a representative water sample.
2. Describe methods for handling the samples collected.

#### SAMPLE ANALYSES

##### GENERAL

1. The laboratory must be certified by the California Department of Health Services for the specific required procedures.
2. Laboratory procedures must be specified and QA/QC sheets must be submitted with the results in the technical report.
3. Limits of detection must meet EPA's practical quantitation limits.
4. Proper chain of custody procedures must be used.

**SOILS:** Specify EPA Methods to determine existing facility contaminants, also use the required EPA Methods 8260 or 8010/8020 to quantify volatile organics to EPA's practical quantitation limits. Specify detection limits.

**WATER:** Specify EPA Methods to quantify contaminants found in soil, also use EPA Methods 502.1/503.1, 502.2 or 524.2. Specify detection limits. Submit samples to the laboratory in unfiltered form and report sample turbidity.

##### REPORTS

Four copies of final reports should be submitted with all information requested.

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD—  
LOS ANGELES REGION**

101 CENTRE PLAZA DRIVE  
MUNTEREY PARK, CALIFORNIA 91754-1136  
(213) 266-7500



January 4, 1991

Ms. Nicole Jarari  
Stoody Company  
P.O. Box 1901  
Industry, CA 91749-1901

**REVIEW OF ADDITIONAL CLARIFIER AND SUMP INVESTIGATION WORK PLAN  
(FILE NO. 105.0263)**

Four copies of a "Workplan for a Clarifier and Sump Investigation" prepared by Clayton Environmental Consultants were received by this office on December 28, 1990. Upon review by staff, the following comments pertain:

1. Contrary to our Work Plan Directive dated October 22, 1990, said work plan does not include remedial work for the subject clarifier and sump, but proposes to "define the lateral and vertical extent of contamination ...", and "first measure the approximate extent of contaminated soil so that the appropriate remediation ... can be set up." It is re-iterated that source elimination and soil remediation are required in the clarifier and sump areas, however, we have no objection to your consultant's proposal to delineate the contamination first.
2. Quality assurance/quality control information including, but not limited to: method blanks, field/travel blanks (water sample), duplicates, matrix spike recovery (soil sample), surrogate recovery and laboratory calibration standards, must accompany all laboratory reports.
3. Be reminded that you are required to monitor the existing and proposed new wells quarterly for a year. First round of sampling should be performed upon completion of the new well down-gradient of the clarifier. Four copies of the first monitoring/progress report is due to this office on or before March 1, 1991. Subsequent reports (four copies) are due on the first of June, September and December, 1991. The December report should include an annual summary.



Ms. Nicole Jafari

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This work plan is now approved. Please notify this office at least ten days in advance of any field operation so that split sampling and/or staff presence can be arranged in ample time. Four copies of an additional clarifier and sump investigation report are due to this office by March 1, 1991.

Note that staff contact for this case has been changed. Please call Samuel Yu at (213)266-7527 if you have any questions, and address all future correspondence to his attention.



ROY R. SAKAIDA

~~Senior Water Resource~~

Control Engineer

cc: Joe Viray, USEPA, Region IX  
Bill Jones, L.A. County Department of Health Services  
Seiichi Saito, L.A. County Department of Health Services,  
Environmental Management  
Leon Directo, L.A. County Sanitation District  
Robert G. Berlian, Main San Gabriel Basin Watermaster  
Tom Stetson, Stetson Engineering, Engineer for Main San  
Gabriel Basin Watermaster  
Don Howard Engineering, Puente Basin Watermaster  
Robert Zicker, Clayton Environmental Consultants

**APPENDIX C**  
**BOREHOLE LITHOLOGIC LOGS**

# LOG OF EXPLORATORY BORING

Project No.: 33508.00  
Client: Stody Company  
Location: Industry, CA  
Logged By: G. Romine

Date: 1/31/91  
Driller: H-F

BORING NO.  
MW-5  
Sheet 1 of 2

## Field Location of Boring:

See Figure 2 and 3

Ground Elevation:

Datum:

Drilling Method: Hollow-stem auger

Hole Diameter: 12.0"

Casing Installation Data: 20 feet of 4" diameter Schedule 40 PVC Blank and 30' of stainless steel 0.01 screen

Drilling Time	Blow Counts	DEPTH	SAMPLE	Soil Group Symbol (uscs)	Litho-graphic Symbol	DESCRIPTION
7:45			SS			ASPHALT
			AU	SM		SILTY SAND: Brown, 85 % fine grained sand, 15% silt, poorly graded, firm, low plasticity, slightly moist, no odor. PID = ND
8:05	6,12,15	5	SS	ML		CLAYEY SILT: Brown, 70% clay, 20% silt, 10% fine grained sand, poorly graded, firm, moderate plasticity, slightly moist, chemical odor. PID = ND
8:10	4,6,8	10	SS	SM		SILTY SAND. PID = ND
			AU	ML		CLAYEY SILT: Brown, firm, 10% lean clay, 90% silt, moderate plasticity, moist, chemical odor. PID = ND
8:15	6,8,10	15	SS	ML		CLAYEY SILT: Brown, 10% lean clay, 90% silt with some fine to medium grained sand, moderate plasticity, firm, moist, no odor. PID = ND
8:20	6,8,8	20	SS	ML		CLAYEY SILT: Same as above. PID = ND
8:30	12,24,24	25	SS	SM		SILTY SAND: Light brown, 80% medium grained sand, 20% silt, some small 1/4" pebbles well rounded to round, poorly graded, moderately hard, moist, no odor. PID = ND
8:40	12,16,28	30	SS	SM		SILTY SAND: Light brown, 90% medium to fine grained sand, 10% silt, some pebbles rounded to subrounded, slightly hard, poorly graded, wet, no odor.

# LOG OF EXPLORATORY BORING

Project No.: 33508.00  
Client: Stoddy Co.  
Location: Industry, CA  
Logged By: G. Romine

Date: 1/31/91  
Driller: H-F

BORING NO.  
MW-5  
Sheet 2 of 2

## Field Location of Boring:

See Figure 2 and 3

Ground Elevation:

Datum:

Drilling Method: Hollow-stem auger

Hole Diameter: 12.0"

Casing Installation Data: 20' of 4" diameter schedule 40 PVC Blank  
and 30' of stainless steel 0.01 screen

Water Level

Time

Date

## DESCRIPTION

Drilling  
Rate  
(ft/min)

Blow  
Counts

D  
E  
P  
T  
H

S  
A  
M  
P  
L  
E

Soil  
Group  
Symbol  
(uscs)

Litho-  
graphic  
Symbol

8:45

35

AU

SM

SILTY SAND: Light brown, 90% medium to fine grained sand, 10% silt.

some pebbles rounded to subrounded, slightly hard, poorly graded.

wet, no odor. PID = ND

SILTY SAND: Brown, 80% medium grained sand, 20% silt, poorly graded.

PID = NT

8:50

40

AU

SP

GRAVELLY SILTY SAND: Light brown, 15% small gravel, 85% medium to

coarse grained sand, gravel, subrounded, poorly graded, slightly hard.

wet, odorless. PID = NT

8:57

45

AU

SP

GRAVELLY SAND: Brown, same as above. PID = NT

9:00

50

AU

SM

SILTY SAND: Brown, 80% medium grained sand, 20% silt poorly graded, hard,

saturated, wet, no odor. PID = NT

Total depth 50 feet.

# LOG OF EXPLORATORY BORING

Project No.: 33508.00  
Client: Stooddy Co.  
Location: Industry, CA  
Logged By: G. Romine

Date: 1/31/91

Driller: H-F

BORING NO.  
BH-10

Sheet 1 of 1

Field Location of Boring:

See Figure 3

Ground Elevation:

Datum:

Drilling Method: Hollow-stem auger

Hole Diameter: 7.5"

Casing Installation Data: None used

Drilling Time	Blow Counts	D E P T H	S A M P L E	Soil Group Symbol (uscs)	Litho- graphic Symbol	Water Level						
						Time						
						Date						
						DESCRIPTION						
7:30	NT	5	SS	CL		Asphalt. PID = ND						
	6,12,18											
		10	SS	ML		CLAY: Dark brown, with some clay, moderate plasticity, stiff, slightly						
	3,10,12											
		15	SS	ML		CLAY: Same as above, but strong odor. PID = 200						
	4,8,18											
		20	SS	ML		CLAYEY SILT: Green, firm, moderate plasticity, moist, strong odor.						
	5,9,16											
		25	SS	SC		CLAYEY SILT: Same as above. PID = 100						
	12,18,17											
		30	SS	ML		SANDY SILT: Light greenish brown, 30% medium grained sand, poorly						
	15,30,30											
						graded, firm, moist, slight odor. PID = 20						
			</									

LOG OF EXPLORATORY BORING						Project No.: 33508.00 Client: Stooddy Co. Location: Industry, CA Logged By: G. Romine		Date: 1/31/91 Driller: H-F		BORING NO. BH-11 Sheet 1 of 1	
Field Location of Boring: See Figure 3						Drilling Method: Hollow-stem auger					
Ground Elevation:						Datum:					
						Hole Diameter: 7.5"					
						Casing Installation Data: Backfilled with neat cement					
Drilling Time	Blow Counts	DEPTH	SAMPLE	Soil Group Symbol (uscs)	Lithographic Symbol	DESCRIPTION					
12:15		6"	SS			ASPHALT					
	4,2,6			SM		SILTY SAND: Brown, 70% fine grained sand, 30% silt, moderately grading, soft, slightly moist, no odor. PID = ND					
			AU	SM							
12:20	3,8,12	5	SS	CL		CLAY: Dark brown, some silt, highly plastic, stiff, slightly moist, no odor. PID = ND					
			AU	ML		CLAYEY SILT: Brown to reddish brown, 30% clay, 70% silt, highly plastic, slightly stiff, slightly moist, no odor. PID = ND					
12:30	7,7,8	10	SS								
12:35	--	15	SS	ML		CLAYEY SILT: Brown, same as above. PID = ND					
12:45	6,7,9	20	SS	ML		SILT: Brown, with some minor clay, and fine grained sand, moderate plasticity, soft, moist, no odor. PID = ND					
12:55	6,7,9	25	SS	CL		SILTY CLAY: Dark brown, with some traces of fine grained sand, high plasticity, soft, moist to wet, no odor. PID = ND					
13:05		30	SS	CL		SILTY CLAY: Dark brown, same as above. PID = ND, total depth 30 feet.					

LOG OF EXPLORATORY BORING						Project No.: 33508.00 Client: Stody Co. Location: Industry, CA Logged By: G. Romine		Date: 1/31/91 Driller: H-F		BORING NO. BH-12 Sheet 1 of 1	
Field Location of Boring: See Figure 4						Drilling Method: Hollow-stem auger					
Ground Elevation:						Datum:					
Casing Installation Data: None installed											
Drilling Time	Blow Counts	DEPTH	SAMPLE	Soil Group Symbol (uscs)	Lithographic Symbol	DESCRIPTION					
	7,10,12	5	SS	ML		CLAYEY SILT: Dark brown, 20% clay, 80% silt with some fine sand, firm, low plasticity, slightly moist, no odor. PID = ND					
	7,12,18	10	SS	ML		CLAYEY SILT: Same as above. PID = ND					
	5,10,15	15	SS	ML		SANDY SILT: Brown, 10% clay, 20% fine to medium sand, 70% silt, firm, low plasticity, slightly moist, no odor. PID = ND					
	6,10,12	20	SS	SM		SILTY SAND: Brown, 30% silt, 70% medium fine grained sand, poorly graded, subangular sand, predominantly quartz, slightly moist, no odor. PID = ND					
	4,7,10	25	SS	ML		SANDY SILT: Dark brown, 80% silt, 20% medium to fine grained sand, firm, low plasticity, moist, no odor. PID = ND					
	10,16,20	30	SS	SM		SAND: Tan, clean medium grained sand, some silt, uniformly graded, subangular sand, quartz composition, slightly moist, no odor. PID = ND					
	20,20,25		SS	ML		CLAYEY SILT: Dark brown, 80% silt, 20% clay, firm to stiff, moderate plasticity, moist, no odor. PID = ND, total depth 30 feet.					

# LOG OF EXPLORATORY BORING

Project No.: 33508.00  
Client: Stoddy Co.  
Location: Industry, CA  
Logged By: G. Romine

Date: 1/31/91  
Driller: H-F

BORING NO.  
BH-13  
Sheet 1 of 1

## Field Location of Boring:

See Figure 4

Ground Elevation:

Datum:

Drilling Method: Hollow-stem auger

Hole Diameter: 7.5"

Casing Installation Data: None installed

Drilling Time	Blow Counts	DEPTH	SAMPLE	Soil Group Symbol (uscs)	Lithographic Symbol	Water Level							
						Time							
						Date							
DESCRIPTION													
	10,5,10		SS	ML									
	5,10,15	5	SS	ML									
	5,10,12	10	SS	ML									
	5,8,10	15	SS	SM									
	5,10,10	20	SS	ML									
	10,11,20	25	SS	SM									
	5,7,17	30	SS	ML									

CLAYEY SILT: Dark brown, 20% clay, 80% silt, with some moderate to fine sand, firm, low plasticity, slightly moist, no odor. PID = ND

CLAYEY SILT: Same as above.

SANDY SILT: Brown, 20% fine grained sand, 80% silt, firm, low plasticity, slightly moist, no odor. PID = ND

SILTY SAND: Light brown, 20% silt, 80% sand, medium grained, poorly graded, predominantly quartz, slightly moist, no odor. PID = ND

SANDY SILT: Dark brown, 80% silt, 20% fine to medium grained sand, firm, low plasticity, moist to slightly moist, no odor. PID = ND

SAND: Tan, medium grained sand with trace of silt, uniformly graded, subangular quartz sand predominant, slightly moist, no odor. PID = ND

CLAYEY SILT: Dark brown, 20% clay, stiff to firm, moderate plasticity, moist, no odor. PID = ND, total depth 30 feet.



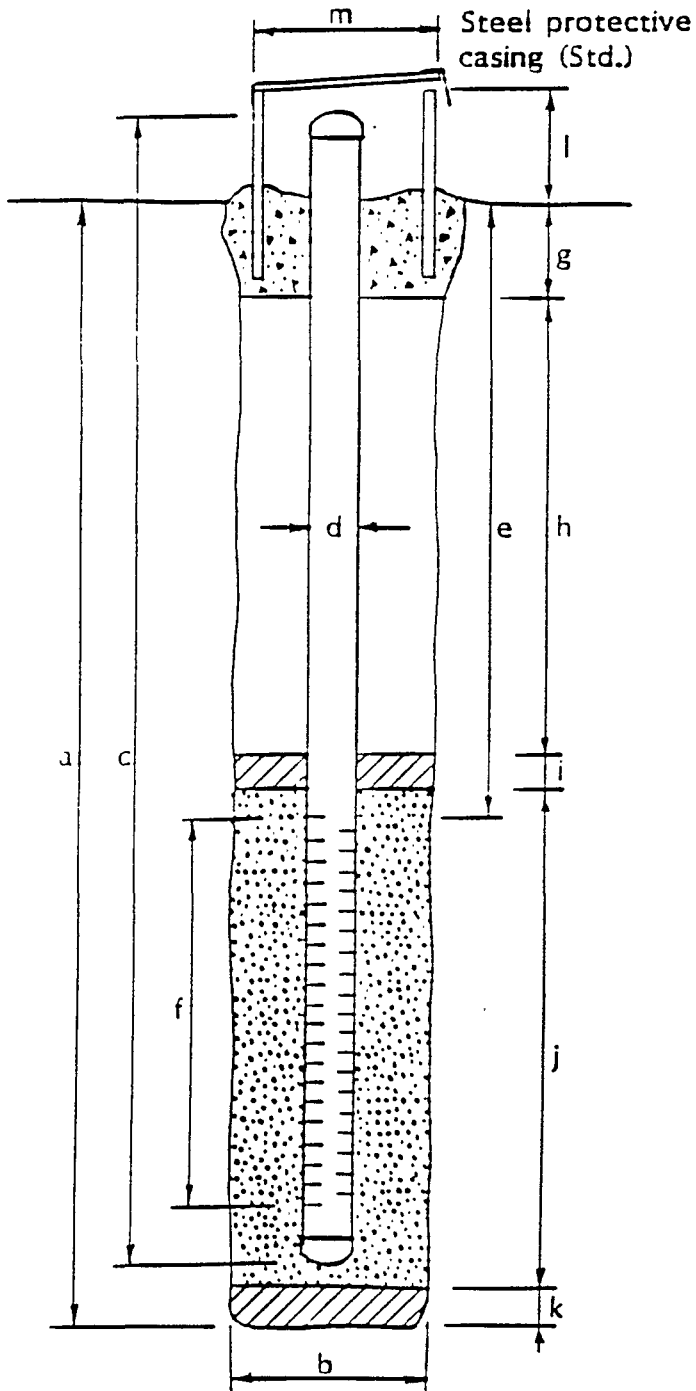
## APPENDIX D

WELL COMPLETION DIAGRAM  
GRAIN SIZE ANALYSIS  
WELL PERMIT

## WELL DETAILS

PROJECT NUMBER 33508.00  
PROJECT NAME Stoody Company  
COUNTY Los Angeles  
WELL PERMIT NO. \_\_\_\_\_

BORING / WELL NO. MW-5  
TOP OF CASING ELEV. \_\_\_\_\_  
GROUND SURFACE ELEV. 320.0  
DATUM \_\_\_\_\_



## EXPLORATORY BORING

a. Total depth 50.0 ft.

b. Diameter 12.0 in.

Drilling method Hollow-stem auger

## WELL CONSTRUCTION

c. Casing length 48.0 ft.  
Material PVC Blank/55 slot

d. Diameter 4.0 in.

e. Depth to top perforations 20.0 ft.

f. Perforated length 30.0 ft.  
Perforated interval from 20.0 to 50.0 ft.  
Perforation type wire wrap  
Perforation size 0.01-inch slot

g. Surface seal          ft.  
Seal material concrete

h. Backfill 12.0 ft.  
Backfill material neat cement

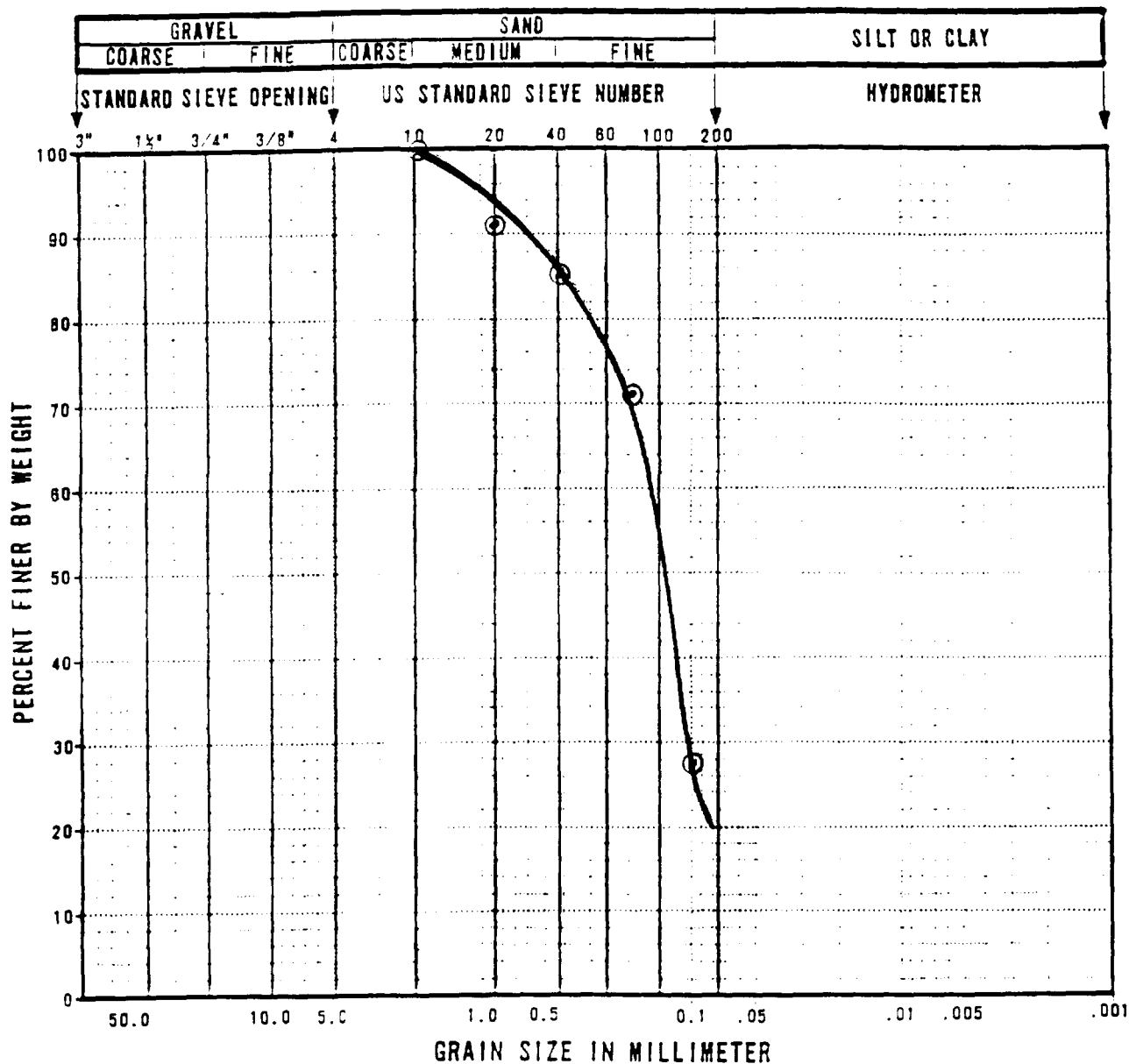
i. Seal 3.0 ft.  
Seal material  bentonite

j. Gravel pack 32.5 ft.  
Pack material No. 2/12 Lonestar sand

k. Bottom seal 0 ft.  
Seal material None installed

l. Casing height -0.4 ft.

m. Protective casing diameter 12.0 in.



SYMBOL	BORING NUMBER	SAMPLE NUMBER	SAMPLE DEPTH (FEET)	SOIL TYPE
—	MW-5	1	45	SILTY/SAND
- - -				
· · ·				

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

FIGURE

GRAIN-SIZE DISTRIBUTION ANALYSIS

1

STOODY COMPANY  
INDUSTRY, CALIFORNIA

PROJECT NO. 33508.00

3/91

## APPLICATION FOR WELL PERMIT

ENVIRONMENTAL MANAGEMENT - 2615 S. GRAND AVENUE, LOS ANGELES, CA 90007, ROOM 404 b 1991

COUNTY OF LOS ANGELES DEPARTMENT OF HEALTH SERVICES

2/1/91

DESCRIPTION	TYPE OF PERMIT (CHECK)		TYPE OF WELL	
	<input checked="" type="checkbox"/> NEW WELL CONSTRUCTION	<input type="checkbox"/> RECONSTRUCTION OR RENOVATION	<input type="checkbox"/> PRIVATE DOMESTIC	<input type="checkbox"/> PUBLIC DOMESTIC
	<input type="checkbox"/> DESTRUCTION	<input type="checkbox"/> IRRIGATION	<input checked="" type="checkbox"/> OBSERVATION/MONITORING	
		<input type="checkbox"/> CATHODIC	<input type="checkbox"/> INDUSTRIAL	
			<input type="checkbox"/> GRAVEL PACK	
			<input type="checkbox"/> TEST	
LOCATION	TYPE OF CASING			
	PVC Schedule 40 and stainless steel slot			
	METHOD OF SEALING OF CASING			
	Surface - concrete sanitary seal			
	Subsurface - volclay (bentonite) grout			
	METHOD OF DESTRUCTION			
APPLICANT	NAME OF WELL DRILLER (PRINT)		NAME OF WELL OWNER (PRINT)	
	Grayson Walker, PE President		Stoody Company	
	TRADE NAME		MAILING ADDRESS	
	H-F Drilling, Inc.		16425 Gale Avenue	
	BUSINESS ADDRESS		CITY	
	1436 B S. Manhattan Avenue, Fullerton		City of Industry, CA	
	<p>I hereby agree to comply in every respect with all regulations of the County Preventive/Public Health Services and with all ordinances and laws of the County of Los Angeles and of the State of California pertaining to well construction, reconstruction and destruction. Upon completion of well and within ten days thereafter, I will furnish the County Preventive/Public Health Services with a complete log of the well, giving date drilled, depth of well, all perforations in casing, and any other data deemed necessary by such County Preventive/Public Health Services.</p>			
	<p><i>David H. Romelle</i> Applicant's Signature</p>			
	<p><b>DISPOSITION OF APPLICATION: (For Sanitarians Use Only)</b></p> <p><input checked="" type="checkbox"/> APPROVED <input type="checkbox"/> DENIED</p> <p><input type="checkbox"/> APPROVED WITH CONDITIONS</p> <p>If denied or approved with conditions, report reason or conditions here:</p>			
	DATE		SANITARIAN	
	2-20-91		S. Mayeda	
	DATE		SECTION CHIEF	
	2-26-91		Jenck Auto	

When signed by Section Chief, this application is a permit.

**SERVICE APPLICATION AND FEE COLLECTION  
COUNTY OF LOS ANGELES - DEPARTMENT OF HEALTH SERVICES  
PUBLIC HEALTH PROGRAMS - ENVIRONMENTAL MANAGEMENT**

**SERVICE REQUEST APPLICATION**

**INSTRUCTIONS**

1. Check the TYPE OF SERVICE requested and attach the required non-refundable fee to the application. Make money order or check payable to LOS ANGELES COUNTY TREASURER, DO NOT SEND CASH. This application is nontransferable.

<u>FEE REQUIRED*</u>	<u>TYPE OF SERVICE</u>
<u>                    </u> <input checked="" type="checkbox"/>	<u>MONITORING WELL CONSTRUCTION/DESTRUCTION</u>
<u>                    </u> <input type="checkbox"/>	<u>WELL CONSTRUCTION, RENOVATION OR DESTRUCTION PERMIT</u> Complete and attach a Well Permit Application
<u>                    </u> <input type="checkbox"/>	<u>PRIVATE SEWAGE DISPOSAL SYSTEM CONSTRUCTION PERMIT</u>
<u>                    </u> <input type="checkbox"/>	<u>PRIVATE SEWAGE DISPOSAL SYSTEM RENOVATION/EXPANSION</u>
<u>                    </u> <input type="checkbox"/>	<u>INSPECTION OF MOUNTAIN CABIN SITE</u> as required by the United States Forest Service
<u>                    </u> <input type="checkbox"/>	<u>INSPECTION OF EXISTING PRIVATE SEWAGE SYSTEM</u> as required by FHA/VA
<u>                    </u> <input type="checkbox"/>	<u>WATER SUPPLY TEST AND CERTIFICATION</u> as required by U.S. Department of Agriculture

2. Check with Contact Office stamped below for requirements or information.
3. Complete the required information or deliver the completed application, money order or check with the forms indicated.

to: County of Los Angeles  
Department of Health Services  
Public Health Programs  
Environmental Management  
2615 S. Grand Ave. 6th Floor  
Los Angeles, Calif. 90007  
744-3214

\* Refer to Schedule of Fees  
for current fiscal year.

**NOTE: FIELD PERSONNEL CANNOT ACCEPT FEES.**

4. Phone Contact Office noted below, after you have received your receipt, to request an inspection.

<u>16425 Gale Avenue, Industry, CA</u>	<u>2/1/91</u>
<b>Service/Job Location Address</b>	<b>Date</b>
<u>Stoody Company</u>	<u>Same as above</u>
<u>(818) 968-0717</u>	
<b>Owner/Applicant's Name</b>	<b>Address</b>
<u>Clayton Environmental Consultants, Inc., 5785 Corporate Avenue, Cypress, CA</u>	<u>906<sup>30</sup>77</u>
<b>Contractor's Name</b>	<b>Address</b>
	<u>Phone No. (714) 229-4806</u>

Co. Engineer Plan Check No. \_\_\_\_\_ Tract No. \_\_\_\_\_ Lot No. \_\_\_\_\_ No. Bedrooms \_\_\_\_\_  
(Complete line above for Private Sewage Disposal System Construction or Renovation Application)

CONTACT OFFICE

DEPARTMENT STAMP

## **APPENDIX E**

### **WATER QUALITY PARAMETERS (DEVELOPMENT) WATER QUALITY PARAMETERS (SAMPLING)**

# CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

## WATER SAMPLING FIELD SURVEY FORM

Job No: 33043.00

Site: Stoody

Date: 2/7/91

Well No: MW-5

Sampling Team: Robert Zicker

Development Method: - Bail using development rig

Field Conditions: Partly sunny/cool

Describe Equipment Decontamination Before Sampling This Well:

3-stage Alconox detergent wash, potable water rinse, de-ionized water rinse

Total Depth  
to Water: 51.39 feet

Time: 8:30

Depth to Water  
Before Purging: 32.2 feet

Volume Height of Water Column: 19.2 feet	*	Diameter <u>2-inch</u> .16	*	Diameter <u>4-inch</u> .65	=	Volume 12.47 gal	*	Purge Factor 5	=	Volume To Purge 62.37
--	---	----------------------------------	---	----------------------------------	---	---------------------	---	----------------------	---	-----------------------------

Depth Purging From: 51 feet

Time Purging Begins: 8:30

Notes on Initial Discharge: Muddy; odorless

Time	Volume Purged	pH	Conductivity	T°F	Comments
9:20	1st bail	8.45	183	64.1°	Light brown/odorless
10:41	18 gal	8.35	176	63.0°	Light brown/odorless
11:18	40 gal	8.13	170	64.6°	Light brown/odorless
11:47	60 gal	7.89	186	66.4°	Cloudy/muddy
12:55	73 gal	7.91	186	66.3	Muddy
13:51	87 gal	7.83	185	68.7	Cloudy/muddy

**CLAYTON ENVIRONMENTAL CONSULTANTS, INC.**  
**WATER SAMPLING FIELD SURVEY FORM**  
**(CONTINUED)**

Time Field Parameter Measurement Begins:

	Rep #1	Rep #2	Rep #3	Rep #4
pH				
Conductivity				
T°F				

Pre-Sample Collection Gallons Purged:

Time Sample Collection Begins:

Time Sample Collection Ends:

Total Gallons Purged: 105

Comments: MW-5 bailed dry after approximately 20 gallons. Recharges slowly.



# CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

## WATER SAMPLING FIELD SURVEY FORM

Job No: 33043.00

Site: Stooddy

Date: 2/13/91

Well No: MW-5

Sampling Team: Robert Zicker

Sampling Method: Hand bail using 2-inch Teflon™ bailer

Field Conditions: Sunny; warm

Describe Equipment Decontamination Before Sampling This Well:

3-stage Alconox detergent wash, potable water rinse, de-ionized water rinse

Total Depth  
to Water:

50.3 feet

Time:

9:51

Depth to Water  
Before Purging:

31.2 feet

Volume  
Height of  
Water  
Column: 19.1  
feet

Diameter  
2-inch

Diameter  
4-inch

Volume

Purge  
Factor

Volume  
To Purge

\*

.16

.65

=

12.4 gal

\*

3

=

37.25

Depth Purging From: 50 feet

Time Purging Begins: 10:40

Notes on Initial Discharge: Clear/cloudy - low turbidity - odorless

Time	Volume Purged	pH	Conductivity	T° F	Comments
10:40	5 gal	7.97	184	68.0°	Cloudy/odorless
10:51	10 gal	7.8	185	67.6°	Cloudy/odorless
11:09	20 gal	7.78	186	67.2°	Cloudy/odorless
12:20	38 gal	8.02	192	69.8°	Cloudy/odorless

**CLAYTON ENVIRONMENTAL CONSULTANTS, INC.**  
**WATER SAMPLING FIELD SURVEY FORM**  
**(CONTINUED)**

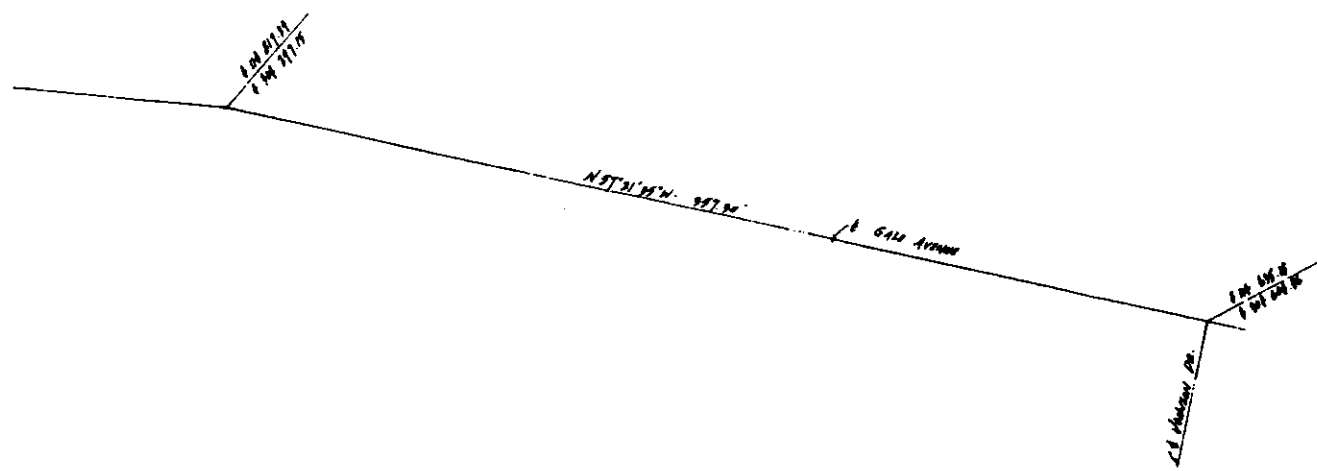
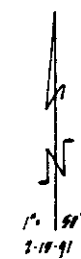
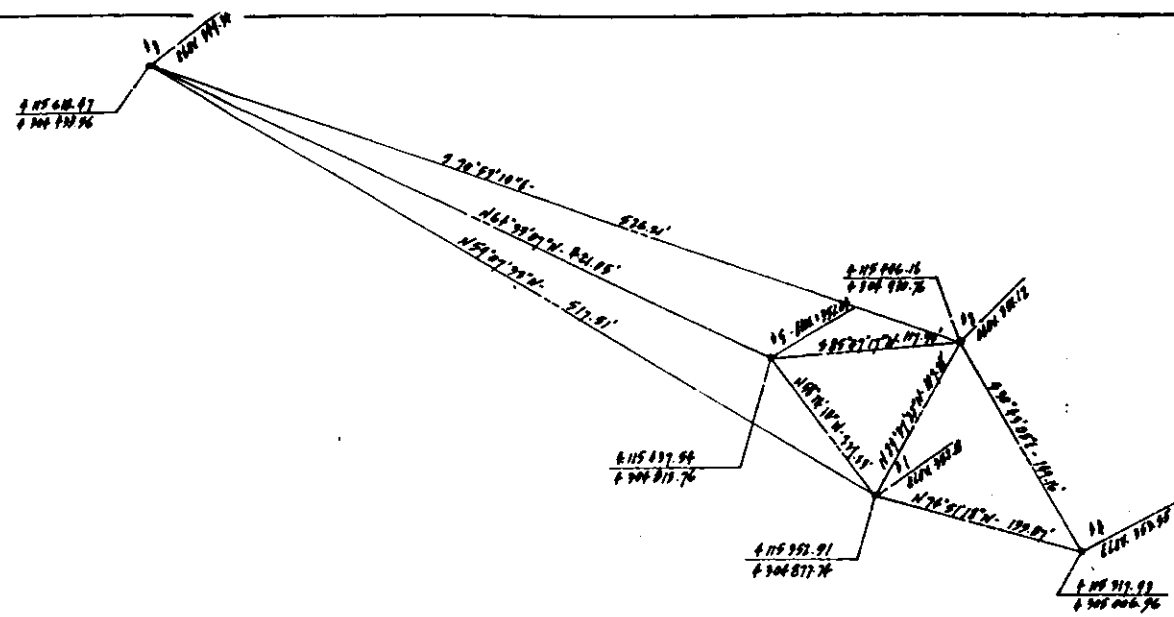
Time Field Parameter Measurement Begins: 12:45

	Rep #1	Rep #2	Rep #3	Rep #4
pH	8.0	7.81	7.78	
Conductivity	187	185	186	
T°F	67.5°	68.2°	68.2°	

Pre-Sample Collection Gallons Purged: 38  
Time Sample Collection Begins: 12:45  
Time Sample Collection Ends: 12:55  
Total Gallons Purged: 40

Comments: Water was cloudy to muddy, light brown, odorless

**APPENDIX F**  
**WELL SURVEY DIAGRAM**



BENCH MARK - ELEV. 968.816  
 G-58 - B.G. Mount. on H.B. COND. CAPTAN  
 DISTANCE 96' 8 1/2" SOUTHWEST OF 75'  
 7/8" GALE AVE.  
 (City of Industry)



Civil Engineer	MONITORING WELL SURVEY
DAVID CHANG, Civil Engineer 112 TURBIDITY CANYON ROAD CITY OF INDUSTRY, CA 91744 (818) 999-6939 UNIT 5	THE STODDY COMPANY 16438 GALE AVENUE CITY OF INDUSTRY, CA 91744 (818) 968-0710

2-18-91  
 1. Field Notes  
 2. APPROX. MAPPING  
 3. REVERSE DISTANCES NOT TO SCALE  
 F.B. 2524 / 8518

1851-003007



24X

00661674

**APPENDIX G**

**LABORATORY ANALYSIS REPORTS AND  
CHAIN-OF-CUSTODY**

1252 Quarry Lane  
P.O. Box 9019  
Pleasanton, CA 94566  
(415) 426-2600  
Fax (415) 426-0106

**RECEIVED**  
**FEB 14 1991**

**Clayton**  
ENVIRONMENTAL  
CONSULTANTS

February 11, 1991

Mr. Guy Romine  
CLAYTON ENVIRONMENTAL CONSULTANTS, INC.  
5785 Corporate Ave. Suite 150  
Cypress, CA 90630

Client Ref. 33508.00  
Clayton Project No. 91020.06

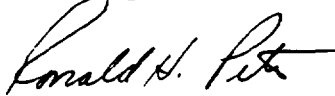
Dear Mr. Romine:

Attached is our analytical laboratory report for the samples received on February 1, 1991. A copy of the Chain-of-Custody form acknowledging receipt of these samples is attached.

Please note that any unused portion of the samples will be disposed of 30 days after the date of this report, unless you have requested otherwise.

We appreciate the opportunity to be of assistance to you. If you have any questions, please contact Maryann Gambino, Client Services Supervisor, at (415) 426-2657.

Sincerely,



Ronald H. Peters, CIH  
Director, Laboratory Services  
Western Operations

RHP/dt  
Attachments

Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.06

Sample Identification:	MW-5-A (1)	Date Sampled:	01/31/91
Lab Number:	9102006-01A	Date Received:	02/01/91
Sample Matrix/Media:	SOIL	Date Prepared:	02/06/91
Analytical Method:	EPA 8240 (Low Level)	Date Analyzed:	02/06/91
Preparation Method:	EPA 5030		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Purgeable Organics</u>			
Chloromethane	74-87-3	ND	0.01
Bromomethane	74-83-9	ND	0.004
Vinyl chloride	75-01-4	ND	0.004
Chloroethane	75-00-3	ND	0.004
Methylene chloride	75-09-2	ND	0.01
Trichlorofluoromethane	75-69-4	ND	0.003
1,1-Dichloroethene	75-35-4	ND	0.003
1,1-Dichloroethane	75-35-3	ND	0.003
Trans-1,2-Dichloroethene	156-60-5	ND	0.003
Cis-1,2-Dichloroethene	156-59-2	ND	0.003
1,2-Dichloroethene (total)	540-59-0	ND	0.003
Chloroform	67-66-3	ND	0.003
1,2-Dichloroethane	107-06-2	ND	0.003
1,1,1-Trichloroethane	71-55-6	ND	0.003
Carbon tetrachloride	56-23-5	ND	0.003
Bromodichloromethane	75-27-4	ND	0.003
1,2-Dichloropropane	78-87-5	ND	0.003
Cis-1,3-Dichloropropene	10061-01-5	ND	0.003
Trichloroethene	79-01-6	ND	0.004
Benzene	71-43-2	ND	0.002
Dibromochloromethane	124-48-1	ND	0.002
1,1,2-Trichloroethane	79-00-5	ND	0.003
Trans-1,3-Dichloropropene	10061-02-6	ND	0.005
2-Chloroethylvinylether	100-75-8	ND	0.003
Bromoform	75-25-2	ND	0.003
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.004
Tetrachloroethene	127-18-4	ND	0.004
Toluene	108-88-3	0.01	0.002
Chlorobenzene	108-90-7	ND	0.003
Ethylbenzene	100-41-4	ND	0.003

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry  
(continued)

Client Reference: 33508.00

Sample Identification: MW-5-A (1)

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
1,3-Dichlorobenzene	541-73-7	ND	0.003
1,2-Dichlorobenzene	95-50-1	ND	0.003
1,4-Dichlorobenzene	106-46-7	ND	0.003
Freon 113	76-13-1	ND	0.003
Total Xylenes	1330-20-7	ND	0.003
Acetone	67-64-1	ND	0.02
2-Butanone	78-93-3	ND	0.02
4-Methyl-2-pentanone	108-10-1	ND	0.02
2-Hexanone	591-78-6	ND	0.02
Vinyl acetate	108-05-4	ND	0.01
Carbon disulfide	75-15-0	ND	0.003
Styrene	100-42-5	ND	0.003
Acrolein	107-02-8	ND	0.01
Acrylonitrile	107-13-1	ND	0.01

ND Not detected at or above limit of detection  
-- Information not available or not applicable



Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.06

Sample Identification:	MW-5-B (5)	Date Sampled:	01/31/91
Lab Number:	9102006-02A	Date Received:	02/01/91
Sample Matrix/Media:	SOIL	Date Prepared:	02/06/91
Analytical Method:	EPA 8240 (Low Level)	Date Analyzed:	02/06/91
Preparation Method:	EPA 5030		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Purgeable Organics</u>			
Chloromethane	74-87-3	ND	0.01
Bromomethane	74-83-9	ND	0.004
Vinyl chloride	75-01-4	ND	0.004
Chloroethane	75-00-3	ND	0.004
Methylene chloride	75-09-2	ND	0.01
Trichlorofluoromethane	75-69-4	ND	0.003
1,1-Dichloroethene	75-35-4	ND	0.003
1,1-Dichloroethane	75-35-3	ND	0.003
Trans-1,2-Dichloroethene	156-60-5	ND	0.003
Cis-1,2-Dichloroethene	156-59-2	ND	0.003
1,2-Dichloroethene (total)	540-59-0	ND	0.003
Chloroform	67-66-3	ND	0.003
1,2-Dichloroethane	107-06-2	ND	0.003
1,1,1-Trichloroethane	71-55-6	ND	0.003
Carbon tetrachloride	56-23-5	ND	0.003
Bromodichloromethane	75-27-4	ND	0.003
1,2-Dichloropropane	78-87-5	ND	0.003
Cis-1,3-Dichloropropene	10061-01-5	ND	0.003
Trichloroethene	79-01-6	ND	0.004
Benzene	71-43-2	ND	0.002
Dibromochloromethane	124-48-1	ND	0.002
1,1,2-Trichloroethane	79-00-5	ND	0.003
Trans-1,3-Dichloropropene	10061-02-6	ND	0.005
2-Chloroethylvinylether	100-75-8	ND	0.003
Bromoform	75-25-2	ND	0.003
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.004
Tetrachloroethene	127-18-4	ND	0.004
Toluene	108-88-3	0.008	0.002
Chlorobenzene	108-90-7	ND	0.003
Ethylbenzene	100-41-4	ND	0.003

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry  
(continued)

Client Reference: 33508.00

Sample Identification: MW-5-B (5)

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
1,3-Dichlorobenzene	541-73-7	ND	0.003
1,2-Dichlorobenzene	95-50-1	ND	0.003
1,4-Dichlorobenzene	106-46-7	ND	0.003
Freon 113	76-13-1	ND	0.003
Total Xylenes	1330-20-7	ND	0.003
Acetone	67-64-1	ND	0.02
2-Butanone	78-93-3	ND	0.02
4-Methyl-2-pentanone	108-10-1	ND	0.02
2-Hexanone	591-78-6	ND	0.02
Vinyl acetate	108-05-4	ND	0.01
Carbon disulfide	75-15-0	ND	0.003
Styrene	100-42-5	ND	0.003
Acrolein	107-02-8	ND	0.01
Acrylonitrile	107-13-1	ND	0.01

ND Not detected at or above limit of detection

-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.06

Sample Identification:	MW-5-C (10)	Date Sampled:	01/31/91
Lab Number:	9102006-03A	Date Received:	02/01/91
Sample Matrix/Media:	SOIL	Date Prepared:	02/06/91
Analytical Method:	EPA 8240 (Low Level)	Date Analyzed:	02/06/91
Preparation Method:	EPA 5030		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Purgeable Organics</u>			
Chloromethane	74-87-3	ND	0.01
Bromomethane	74-83-9	ND	0.004
Vinyl chloride	75-01-4	ND	0.004
Chloroethane	75-00-3	ND	0.004
Methylene chloride	75-09-2	ND	0.01
Trichlorofluoromethane	75-69-4	ND	0.003
1,1-Dichloroethene	75-35-4	ND	0.003
1,1-Dichloroethane	75-35-3	ND	0.003
Trans-1,2-Dichloroethene	156-60-5	ND	0.003
Cis-1,2-Dichloroethene	156-59-2	ND	0.003
1,2-Dichloroethene (total)	540-59-0	ND	0.003
Chloroform	67-66-3	ND	0.003
1,2-Dichloroethane	107-06-2	ND	0.003
1,1,1-Trichloroethane	71-55-6	ND	0.003
Carbon tetrachloride	56-23-5	ND	0.003
Bromodichloromethane	75-27-4	ND	0.003
1,2-Dichloropropane	78-87-5	ND	0.003
Cis-1,3-Dichloropropene	10061-01-5	ND	0.003
Trichloroethene	79-01-6	ND	0.004
Benzene	71-43-2	ND	0.002
Dibromochloromethane	124-48-1	ND	0.002
1,1,2-Trichloroethane	79-00-5	ND	0.003
Trans-1,3-Dichloropropene	10061-02-6	ND	0.005
2-Chloroethylvinylether	100-75-8	ND	0.003
Bromoform	75-25-2	ND	0.003
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.004
Tetrachloroethene	127-18-4	ND	0.004
Toluene	108-88-3	0.005	0.002
Chlorobenzene	108-90-7	ND	0.003
Ethylbenzene	100-41-4	ND	0.003

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry  
(continued)

Client Reference: 33508.00

Sample Identification: MW-5-C (10)

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
1,3-Dichlorobenzene	541-73-7	ND	0.003
1,2-Dichlorobenzene	95-50-1	ND	0.003
1,4-Dichlorobenzene	106-46-7	ND	0.003
Freon 113	76-13-1	ND	0.003
Total Xylenes	1330-20-7	ND	0.003
Acetone	67-64-1	ND	0.02
2-Butanone	78-93-3	ND	0.02
4-Methyl-2-pentanone	108-10-1	ND	0.02
2-Hexanone	591-78-6	ND	0.02
Vinyl acetate	108-05-4	ND	0.01
Carbon disulfide	75-15-0	ND	0.003
Styrene	100-42-5	ND	0.003
Acrolein	107-02-8	ND	0.01
Acrylonitrile	107-13-1	ND	0.01

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.06

Sample Identification:	MW-5-D (15)	Date Sampled:	01/31/91
Lab Number:	9102006-04A	Date Received:	02/01/91
Sample Matrix/Media:	SOIL	Date Prepared:	02/06/91
Analytical Method:	EPA 8240 (Low Level)	Date Analyzed:	02/06/91
Preparation Method:	EPA 5030		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Purgeable Organics</u>			
Chloromethane	74-87-3	ND	0.01
Bromomethane	74-83-9	ND	0.004
Vinyl chloride	75-01-4	ND	0.004
Chloroethane	75-00-3	ND	0.004
Methylene chloride	75-09-2	ND	0.01
Trichlorofluoromethane	75-69-4	ND	0.003
1,1-Dichloroethene	75-35-4	ND	0.003
1,1-Dichloroethane	75-35-3	ND	0.003
Trans-1,2-Dichloroethene	156-60-5	ND	0.003
Cis-1,2-Dichloroethene	156-59-2	ND	0.003
1,2-Dichloroethene (total)	540-59-0	ND	0.003
Chloroform	67-66-3	ND	0.003
1,2-Dichloroethane	107-06-2	ND	0.003
1,1,1-Trichloroethane	71-55-6	ND	0.003
Carbon tetrachloride	56-23-5	ND	0.003
Bromodichloromethane	75-27-4	ND	0.003
1,2-Dichloropropane	78-87-5	ND	0.003
Cis-1,3-Dichloropropene	10061-01-5	ND	0.003
Trichloroethene	79-01-6	ND	0.004
Benzene	71-43-2	ND	0.002
Dibromochloromethane	124-48-1	ND	0.002
1,1,2-Trichloroethane	79-00-5	ND	0.003
Trans-1,3-Dichloropropene	10061-02-6	ND	0.005
2-Chloroethylvinylether	100-75-8	ND	0.003
Bromoform	75-25-2	ND	0.003
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.004
Tetrachloroethene	127-18-4	ND	0.004
Toluene	108-88-3	ND	0.002
Chlorobenzene	108-90-7	ND	0.003
Ethylbenzene	100-41-4	ND	0.003

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry  
(continued)

Client Reference: 33508.00

Sample Identification: MW-5-D (15)

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
1,3-Dichlorobenzene	541-73-7	ND	0.003
1,2-Dichlorobenzene	95-50-1	ND	0.003
1,4-Dichlorobenzene	106-46-7	ND	0.003
Freon 113	76-13-1	ND	0.003
Total Xylenes	1330-20-7	ND	0.003
Acetone	67-64-1	ND	0.02
2-Butanone	78-93-3	ND	0.02
4-Methyl-2-pentanone	108-10-1	ND	0.02
2-Hexanone	591-78-6	ND	0.02
Vinyl acetate	108-05-4	ND	0.01
Carbon disulfide	75-15-0	ND	0.003
Styrene	100-42-5	ND	0.003
Acrolein	107-02-8	ND	0.01
Acrylonitrile	107-13-1	ND	0.01

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.06

Sample Identification:	MW-5-E (20)	Date Sampled:	01/31/91
Lab Number:	9102006-05A	Date Received:	02/01/91
Sample Matrix/Media:	SOIL	Date Prepared:	02/06/91
Analytical Method:	EPA 8240 (Low Level)	Date Analyzed:	02/06/91
Preparation Method:	EPA 5030		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Purgeable Organics</u>			
Chloromethane	74-87-3	ND	0.01
Bromomethane	74-83-9	ND	0.004
Vinyl chloride	75-01-4	ND	0.004
Chloroethane	75-00-3	ND	0.004
Methylene chloride	75-09-2	ND	0.01
Trichlorofluoromethane	75-69-4	ND	0.003
1,1-Dichloroethene	75-35-4	ND	0.003
1,1-Dichloroethane	75-35-3	ND	0.003
Trans-1,2-Dichloroethene	156-60-5	ND	0.003
Cis-1,2-Dichloroethene	156-59-2	ND	0.003
1,2-Dichloroethene (total)	540-59-0	ND	0.003
Chloroform	67-66-3	ND	0.003
1,2-Dichloroethane	107-06-2	ND	0.003
1,1,1-Trichloroethane	71-55-6	ND	0.003
Carbon tetrachloride	56-23-5	ND	0.003
Bromodichloromethane	75-27-4	ND	0.003
1,2-Dichloropropane	78-87-5	ND	0.003
Cis-1,3-Dichloropropene	10061-01-5	ND	0.003
Trichloroethene	79-01-6	ND	0.004
Benzene	71-43-2	ND	0.002
Dibromochloromethane	124-48-1	ND	0.002
1,1,2-Trichloroethane	79-00-5	ND	0.003
Trans-1,3-Dichloropropene	10061-02-6	ND	0.005
2-Chloroethylvinylether	100-75-8	ND	0.003
Bromoform	75-25-2	ND	0.003
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.004
Tetrachloroethene	127-18-4	ND	0.004
Toluene	108-88-3	0.013	0.002
Chlorobenzene	108-90-7	ND	0.003
Ethylbenzene	100-41-4	ND	0.003

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry  
(continued)

Client Reference: 33508.00

Sample Identification: MW-5-E (20)

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
1,3-Dichlorobenzene	541-73-7	ND	0.003
1,2-Dichlorobenzene	95-50-1	ND	0.003
1,4-Dichlorobenzene	106-46-7	ND	0.003
Freon 113	76-13-1	ND	0.003
Total Xylenes	1330-20-7	ND	0.003
Acetone	67-64-1	ND	0.02
2-Butanone	78-93-3	ND	0.02
4-Methyl-2-pentanone	108-10-1	ND	0.02
2-Hexanone	591-78-6	ND	0.02
Vinyl acetate	108-05-4	ND	0.01
Carbon disulfide	75-15-0	ND	0.003
Styrene	100-42-5	ND	0.003
Acrolein	107-02-8	ND	0.01
Acrylonitrile	107-13-1	ND	0.01

ND Not detected at or above limit of detection  
-- Information not available or not applicable



Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.06

Sample Identification:	MW-5-F (25)	Date Sampled:	01/31/91
Lab Number:	9102006-06A	Date Received:	02/01/91
Sample Matrix/Media:	SOIL	Date Prepared:	02/06/91
Analytical Method:	EPA 8240 (Low Level)	Date Analyzed:	02/06/91
Preparation Method:	EPA 5030		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Purgeable Organics</u>			
Chloromethane	74-87-3	ND	0.01
Bromomethane	74-83-9	ND	0.004
Vinyl chloride	75-01-4	ND	0.004
Chloroethane	75-00-3	ND	0.004
Methylene chloride	75-09-2	ND	0.01
Trichlorofluoromethane	75-69-4	ND	0.003
1,1-Dichloroethene	75-35-4	ND	0.003
1,1-Dichloroethane	75-35-3	ND	0.003
Trans-1,2-Dichloroethene	156-60-5	ND	0.003
Cis-1,2-Dichloroethene	156-59-2	ND	0.003
1,2-Dichloroethene (total)	540-59-0	ND	0.003
Chloroform	67-66-3	ND	0.003
1,2-Dichloroethane	107-06-2	ND	0.003
1,1,1-Trichloroethane	71-55-6	ND	0.003
Carbon tetrachloride	56-23-5	ND	0.003
Bromodichloromethane	75-27-4	ND	0.003
1,2-Dichloropropane	78-87-5	ND	0.003
Cis-1,3-Dichloropropene	10061-01-5	ND	0.003
Trichloroethene	79-01-6	ND	0.004
Benzene	71-43-2	ND	0.002
Dibromochloromethane	124-48-1	ND	0.002
1,1,2-Trichloroethane	79-00-5	ND	0.003
Trans-1,3-Dichloropropene	10061-02-6	ND	0.005
2-Chloroethylvinylether	100-75-8	ND	0.003
Bromoform	75-25-2	ND	0.003
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.004
Tetrachloroethene	127-18-4	0.004	0.004
Toluene	108-88-3	0.003	0.002
Chlorobenzene	108-90-7	ND	0.003
Ethylbenzene	100-41-4	ND	0.003

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry  
(continued)

Client Reference: 33508.00

Sample Identification: MW-5-F (25)

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
1,3-Dichlorobenzene	541-73-7	ND	0.003
1,2-Dichlorobenzene	95-50-1	ND	0.003
1,4-Dichlorobenzene	106-46-7	ND	0.003
Freon 113	76-13-1	ND	0.003
Total Xylenes	1330-20-7	ND	0.003
Acetone	67-64-1	ND	0.02
2-Butanone	78-93-3	ND	0.02
4-Methyl-2-pentanone	108-10-1	ND	0.02
2-Hexanone	591-78-6	ND	0.02
Vinyl acetate	108-05-4	ND	0.01
Carbon disulfide	75-15-0	ND	0.003
Styrene	100-42-5	ND	0.003
Acrolein	107-02-8	ND	0.01
Acrylonitrile	107-13-1	ND	0.01

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.06

Sample Identification:	MW-5-G (30)	Date Sampled:	01/31/91
Lab Number:	9102006-07A	Date Received:	02/01/91
Sample Matrix/Media:	SOIL	Date Prepared:	02/06/91
Analytical Method:	EPA 8240 (Low Level)	Date Analyzed:	02/06/91
Preparation Method:	EPA 5030		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Purgeable Organics</u>			
Chloromethane	74-87-3	ND	0.01
Bromomethane	74-83-9	ND	0.004
Vinyl chloride	75-01-4	ND	0.004
Chloroethane	75-00-3	ND	0.004
Methylene chloride	75-09-2	ND	0.01
Trichlorofluoromethane	75-69-4	ND	0.003
1,1-Dichloroethene	75-35-4	ND	0.003
1,1-Dichloroethane	75-35-3	ND	0.003
Trans-1,2-Dichloroethene	156-60-5	ND	0.003
Cis-1,2-Dichloroethene	156-59-2	ND	0.003
1,2-Dichloroethene (total)	540-59-0	ND	0.003
Chloroform	67-66-3	ND	0.003
1,2-Dichloroethane	107-06-2	ND	0.003
1,1,1-Trichloroethane	71-55-6	ND	0.003
Carbon tetrachloride	56-23-5	ND	0.003
Bromodichloromethane	75-27-4	ND	0.003
1,2-Dichloropropane	78-87-5	ND	0.003
Cis-1,3-Dichloropropene	10061-01-5	ND	0.003
Trichloroethene	79-01-6	ND	0.004
Benzene	71-43-2	ND	0.002
Dibromochloromethane	124-48-1	ND	0.002
1,1,2-Trichloroethane	79-00-5	ND	0.003
Trans-1,3-Dichloropropene	10061-02-6	ND	0.005
2-Chloroethylvinylether	100-75-8	ND	0.003
Bromoform	75-25-2	ND	0.003
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.004
Tetrachloroethene	127-18-4	ND	0.004
Toluene	108-88-3	0.012	0.002
Chlorobenzene	108-90-7	ND	0.003
Ethylbenzene	100-41-4	ND	0.003

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry  
(continued)

Client Reference: 33508.00

Sample Identification: MW-5-G (30)

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
1,3-Dichlorobenzene	541-73-7	ND	0.003
1,2-Dichlorobenzene	95-50-1	ND	0.003
1,4-Dichlorobenzene	106-46-7	ND	0.003
Freon 113	76-13-1	ND	0.003
Total Xylenes	1330-20-7	ND	0.003
Acetone	67-64-1	ND	0.02
2-Butanone	78-93-3	ND	0.02
4-Methyl-2-pentanone	108-10-1	ND	0.02
2-Hexanone	591-78-6	ND	0.02
Vinyl acetate	108-05-4	ND	0.01
Carbon disulfide	75-15-0	ND	0.003
Styrene	100-42-5	ND	0.003
Acrolein	107-02-8	ND	0.01
Acrylonitrile	107-13-1	ND	0.01

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.06

Sample Identification:	BH-11-A (1)	Date Sampled:	01/31/91
Lab Number:	9102006-08A	Date Received:	02/01/91
Sample Matrix/Media:	SOIL	Date Prepared:	02/06/91
Analytical Method:	EPA 8240 (Low Level)	Date Analyzed:	02/06/91
Preparation Method:	EPA 5030		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Purgeable Organics</u>			
Chloromethane	74-87-3	ND	0.01
Bromomethane	74-83-9	ND	0.004
Vinyl chloride	75-01-4	ND	0.004
Chloroethane	75-00-3	ND	0.004
Methylene chloride	75-09-2	ND	0.01
Trichlorofluoromethane	75-69-4	ND	0.003
1,1-Dichloroethene	75-35-4	ND	0.003
1,1-Dichloroethane	75-35-3	ND	0.003
Trans-1,2-Dichloroethene	156-60-5	ND	0.003
Cis-1,2-Dichloroethene	156-59-2	ND	0.003
1,2-Dichloroethene (total)	540-59-0	ND	0.003
Chloroform	67-66-3	ND	0.003
1,2-Dichloroethane	107-06-2	ND	0.003
1,1,1-Trichloroethane	71-55-6	ND	0.003
Carbon tetrachloride	56-23-5	ND	0.003
Bromodichloromethane	75-27-4	ND	0.003
1,2-Dichloropropane	78-87-5	ND	0.003
Cis-1,3-Dichloropropene	10061-01-5	ND	0.003
Trichloroethene	79-01-6	ND	0.004
Benzene	71-43-2	ND	0.002
Dibromochloromethane	124-48-1	ND	0.002
1,1,2-Trichloroethane	79-00-5	ND	0.003
Trans-1,3-Dichloropropene	10061-02-6	ND	0.005
2-Chloroethylvinylether	100-75-8	ND	0.003
Bromoform	75-25-2	ND	0.003
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.004
Tetrachloroethene	127-18-4	ND	0.004
Toluene	108-88-3	0.028	0.002
Chlorobenzene	108-90-7	ND	0.003
Ethylbenzene	100-41-4	ND	0.003

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry  
(continued)

Client Reference: 33508.00

Sample Identification: BH-11-A (1)

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
1,3-Dichlorobenzene	541-73-7	ND	0.003
1,2-Dichlorobenzene	95-50-1	ND	0.003
1,4-Dichlorobenzene	106-46-7	ND	0.003
Freon 113	76-13-1	ND	0.003
Total Xylenes	1330-20-7	ND	0.003
Acetone	67-64-1	ND	0.02
2-Butanone	78-93-3	ND	0.02
4-Methyl-2-pentanone	108-10-1	ND	0.02
2-Hexanone	591-78-6	ND	0.02
Vinyl acetate	108-05-4	ND	0.01
Carbon disulfide	75-15-0	ND	0.003
Styrene	100-42-5	ND	0.003
Acrolein	107-02-8	ND	0.01
Acrylonitrile	107-13-1	ND	0.01

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.06

Sample Identification: BH-11-B (5)	Date Sampled: 01/31/91
Lab Number: 9102006-09A	Date Received: 02/01/91
Sample Matrix/Media: SOIL	Date Prepared: 02/06/91
Analytical Method: EPA 8240 (Low Level)	Date Analyzed: 02/06/91
Preparation Method: EPA 5030	

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Purgeable Organics</u>			
Chloromethane	74-87-3	ND	0.01
Bromomethane	74-83-9	ND	0.004
Vinyl chloride	75-01-4	ND	0.004
Chloroethane	75-00-3	ND	0.004
Methylene chloride	75-09-2	ND	0.01
Trichlorofluoromethane	75-69-4	ND	0.003
1,1-Dichloroethene	75-35-4	ND	0.003
1,1-Dichloroethane	75-35-3	ND	0.003
Trans-1,2-Dichloroethene	156-60-5	ND	0.003
Cis-1,2-Dichloroethene	156-59-2	ND	0.003
1,2-Dichloroethene (total)	540-59-0	ND	0.003
Chloroform	67-66-3	ND	0.003
1,2-Dichloroethane	107-06-2	ND	0.003
1,1,1-Trichloroethane	71-55-6	ND	0.003
Carbon tetrachloride	56-23-5	ND	0.003
Bromodichloromethane	75-27-4	ND	0.003
1,2-Dichloropropane	78-87-5	ND	0.003
Cis-1,3-Dichloropropene	10061-01-5	ND	0.003
Trichloroethene	79-01-6	ND	0.004
Benzene	71-43-2	ND	0.002
Dibromochloromethane	124-48-1	ND	0.002
1,1,2-Trichloroethane	79-00-5	ND	0.003
Trans-1,3-Dichloropropene	10061-02-6	ND	0.005
2-Chloroethylvinylether	100-75-8	ND	0.003
Bromoform	75-25-2	ND	0.003
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.004
Tetrachloroethene	127-18-4	ND	0.004
Toluene	108-88-3	0.002	0.002
Chlorobenzene	108-90-7	ND	0.003
Ethylbenzene	100-41-4	ND	0.003

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry  
(continued)

Client Reference: 33508.00

Sample Identification: BH-11-B (5)

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
1,3-Dichlorobenzene	541-73-7	ND	0.003
1,2-Dichlorobenzene	95-50-1	ND	0.003
1,4-Dichlorobenzene	106-46-7	ND	0.003
Freon 113	76-13-1	ND	0.003
Total Xylenes	1330-20-7	ND	0.003
Acetone	67-64-1	ND	0.02
2-Butanone	78-93-3	ND	0.02
4-Methyl-2-pentanone	108-10-1	ND	0.02
2-Hexanone	591-78-6	ND	0.02
Vinyl acetate	108-05-4	ND	0.01
Carbon disulfide	75-15-0	ND	0.003
Styrene	100-42-5	ND	0.003
Acrolein	107-02-8	ND	0.01
Acrylonitrile	107-13-1	ND	0.01

ND Not detected at or above limit of detection  
-- Information not available or not applicable



Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.06

Sample Identification:	BH-11-C (10)	Date Sampled:	01/31/91
Lab Number:	9102006-10A	Date Received:	02/01/91
Sample Matrix/Media:	SOIL	Date Prepared:	02/07/91
Analytical Method:	EPA 8240 (Low Level)	Date Analyzed:	02/07/91
Preparation Method:	EPA 5030		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Purgeable Organics</u>			
Chloromethane	74-87-3	ND	0.01
Bromomethane	74-83-9	ND	0.004
Vinyl chloride	75-01-4	ND	0.004
Chloroethane	75-00-3	ND	0.004
Methylene chloride	75-09-2	ND	0.01
Trichlorofluoromethane	75-69-4	ND	0.003
1,1-Dichloroethene	75-35-4	ND	0.003
1,1-Dichloroethane	75-35-3	ND	0.003
Trans-1,2-Dichloroethene	156-60-5	ND	0.003
Cis-1,2-Dichloroethene	156-59-2	ND	0.003
1,2-Dichloroethene (total)	540-59-0	ND	0.003
Chloroform	67-66-3	ND	0.003
1,2-Dichloroethane	107-06-2	ND	0.003
1,1,1-Trichloroethane	71-55-6	ND	0.003
Carbon tetrachloride	56-23-5	ND	0.003
Bromodichloromethane	75-27-4	ND	0.003
1,2-Dichloropropane	78-87-5	ND	0.003
Cis-1,3-Dichloropropene	10061-01-5	ND	0.003
Trichloroethene	79-01-6	ND	0.004
Benzene	71-43-2	ND	0.002
Dibromochloromethane	124-48-1	ND	0.002
1,1,2-Trichloroethane	79-00-5	ND	0.003
Trans-1,3-Dichloropropene	10061-02-6	ND	0.005
2-Chloroethylvinylether	100-75-8	ND	0.003
Bromoform	75-25-2	ND	0.003
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.004
Tetrachloroethene	127-18-4	ND	0.004
Toluene	108-88-3	ND	0.002
Chlorobenzene	108-90-7	ND	0.003
Ethylbenzene	100-41-4	ND	0.003

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry  
(continued)

Client Reference: 33508.00

Sample Identification: BH-11-C (10)

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
1,3-Dichlorobenzene	541-73-7	ND	0.003
1,2-Dichlorobenzene	95-50-1	ND	0.003
1,4-Dichlorobenzene	106-46-7	ND	0.003
Freon 113	76-13-1	ND	0.003
Total Xylenes	1330-20-7	ND	0.003
Acetone	67-64-1	ND	0.02
2-Butanone	78-93-3	ND	0.02
4-Methyl-2-pentanone	108-10-1	ND	0.02
2-Hexanone	591-78-6	ND	0.02
Vinyl acetate	108-05-4	ND	0.01
Carbon disulfide	75-15-0	ND	0.003
Styrene	100-42-5	ND	0.003
Acrolein	107-02-8	ND	0.01
Acrylonitrile	107-13-1	ND	0.01

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.06

Sample Identification:	BH-11-D (15)	Date Sampled:	01/31/91
Lab Number:	9102006-11A	Date Received:	02/01/91
Sample Matrix/Media:	SOIL	Date Prepared:	02/07/91
Analytical Method:	EPA 8240 (Low Level)	Date Analyzed:	02/07/91
Preparation Method:	EPA 5030		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Purgeable Organics</u>			
Chloromethane	74-87-3	ND	0.01
Bromomethane	74-83-9	ND	0.004
Vinyl chloride	75-01-4	ND	0.004
Chloroethane	75-00-3	ND	0.004
Methylene chloride	75-09-2	ND	0.01
Trichlorofluoromethane	75-69-4	ND	0.003
1,1-Dichloroethene	75-35-4	ND	0.003
1,1-Dichloroethane	75-35-3	ND	0.003
Trans-1,2-Dichloroethene	156-60-5	ND	0.003
Cis-1,2-Dichloroethene	156-59-2	ND	0.003
1,2-Dichloroethene (total)	540-59-0	ND	0.003
Chloroform	67-66-3	ND	0.003
1,2-Dichloroethane	107-06-2	ND	0.003
1,1,1-Trichloroethane	71-55-6	ND	0.003
Carbon tetrachloride	56-23-5	ND	0.003
Bromodichloromethane	75-27-4	ND	0.003
1,2-Dichloropropane	78-87-5	ND	0.003
Cis-1,3-Dichloropropene	10061-01-5	ND	0.003
Trichloroethene	79-01-6	ND	0.004
Benzene	71-43-2	ND	0.002
Dibromochloromethane	124-48-1	ND	0.002
1,1,2-Trichloroethane	79-00-5	ND	0.003
Trans-1,3-Dichloropropene	10061-02-6	ND	0.005
2-Chloroethylvinylether	100-75-8	ND	0.003
Bromoform	75-25-2	ND	0.003
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.004
Tetrachloroethene	127-18-4	ND	0.004
Toluene	108-88-3	ND	0.002
Chlorobenzene	108-90-7	ND	0.003
Ethylbenzene	100-41-4	ND	0.003

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry  
(continued)

Client Reference: 33508.00

Sample Identification: BH-11-D (15)

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
1,3-Dichlorobenzene	541-73-7	ND	0.003
1,2-Dichlorobenzene	95-50-1	ND	0.003
1,4-Dichlorobenzene	106-46-7	ND	0.003
Freon 113	76-13-1	ND	0.003
Total Xylenes	1330-20-7	ND	0.003
Acetone	67-64-1	ND	0.02
2-Butanone	78-93-3	ND	0.02
4-Methyl-2-pentanone	108-10-1	ND	0.02
2-Hexanone	591-78-6	ND	0.02
Vinyl acetate	108-05-4	ND	0.01
Carbon disulfide	75-15-0	ND	0.003
Styrene	100-42-5	ND	0.003
Acrolein	107-02-8	ND	0.01
Acrylonitrile	107-13-1	ND	0.01

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody IndustryClient Reference: 33508.00  
Clayton Project No. 91020.06

Sample Identification:	BH-11-E (20)	Date Sampled:	01/31/91
Lab Number:	9102006-12A	Date Received:	02/01/91
Sample Matrix/Media:	SOIL	Date Prepared:	02/07/91
Analytical Method:	EPA 8240 (Low Level)	Date Analyzed:	02/07/91
Preparation Method:	EPA 5030		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Purgeable Organics</u>			
Chloromethane	74-87-3	ND	0.01
Bromomethane	74-83-9	ND	0.004
Vinyl chloride	75-01-4	ND	0.004
Chloroethane	75-00-3	ND	0.004
Methylene chloride	75-09-2	ND	0.01
Trichlorofluoromethane	75-69-4	ND	0.003
1,1-Dichloroethene	75-35-4	ND	0.003
1,1-Dichloroethane	75-35-3	ND	0.003
Trans-1,2-Dichloroethene	156-60-5	ND	0.003
Cis-1,2-Dichloroethene	156-59-2	ND	0.003
1,2-Dichloroethene (total)	540-59-0	ND	0.003
Chloroform	67-66-3	ND	0.003
1,2-Dichloroethane	107-06-2	ND	0.003
1,1,1-Trichloroethane	71-55-6	ND	0.003
Carbon tetrachloride	56-23-5	ND	0.003
Bromodichloromethane	75-27-4	ND	0.003
1,2-Dichloropropane	78-87-5	ND	0.003
Cis-1,3-Dichloropropene	10061-01-5	ND	0.003
Trichloroethene	79-01-6	ND	0.004
Benzene	71-43-2	ND	0.002
Dibromochloromethane	124-48-1	ND	0.002
1,1,2-Trichloroethane	79-00-5	ND	0.003
Trans-1,3-Dichloropropene	10061-02-6	ND	0.005
2-Chloroethylvinylether	100-75-8	ND	0.003
Bromoform	75-25-2	ND	0.003
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.004
Tetrachloroethene	127-18-4	ND	0.004
Toluene	108-88-3	ND	0.002
Chlorobenzene	108-90-7	ND	0.003
Ethylbenzene	100-41-4	ND	0.003

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry  
(continued)

Client Reference: 33508.00

Sample Identification: BH-11-E (20)

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
1,3-Dichlorobenzene	541-73-7	ND	0.003
1,2-Dichlorobenzene	95-50-1	ND	0.003
1,4-Dichlorobenzene	106-46-7	ND	0.003
Freon 113	76-13-1	ND	0.003
Total Xylenes	1330-20-7	ND	0.003
Acetone	67-64-1	ND	0.02
2-Butanone	78-93-3	ND	0.02
4-Methyl-2-pentanone	108-10-1	ND	0.02
2-Hexanone	591-78-6	ND	0.02
Vinyl acetate	108-05-4	ND	0.01
Carbon disulfide	75-15-0	ND	0.003
Styrene	100-42-5	ND	0.003
Acrolein	107-02-8	ND	0.01
Acrylonitrile	107-13-1	ND	0.01

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.06

Sample Identification:	BH-11-F (25)	Date Sampled:	01/31/91
Lab Number:	9102006-13A	Date Received:	02/01/91
Sample Matrix/Media:	SOIL	Date Prepared:	02/07/91
Analytical Method:	EPA 8240 (Low Level)	Date Analyzed:	02/07/91
Preparation Method:	EPA 5030		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Purgeable Organics</u>			
Chloromethane	74-87-3	ND	0.01
Bromomethane	74-83-9	ND	0.004
Vinyl chloride	75-01-4	ND	0.004
Chloroethane	75-00-3	ND	0.004
Methylene chloride	75-09-2	ND	0.01
Trichlorofluoromethane	75-69-4	ND	0.003
1,1-Dichloroethene	75-35-4	ND	0.003
1,1-Dichloroethane	75-35-3	ND	0.003
Trans-1,2-Dichloroethene	156-60-5	ND	0.003
Cis-1,2-Dichloroethene	156-59-2	ND	0.003
1,2-Dichloroethene (total)	540-59-0	ND	0.003
Chloroform	67-66-3	ND	0.003
1,2-Dichloroethane	107-06-2	ND	0.003
1,1,1-Trichloroethane	71-55-6	ND	0.003
Carbon tetrachloride	56-23-5	ND	0.003
Bromodichloromethane	75-27-4	ND	0.003
1,2-Dichloropropane	78-87-5	ND	0.003
Cis-1,3-Dichloropropene	10061-01-5	ND	0.003
Trichloroethene	79-01-6	ND	0.004
Benzene	71-43-2	ND	0.002
Dibromochloromethane	124-48-1	ND	0.002
1,1,2-Trichloroethane	79-00-5	ND	0.003
Trans-1,3-Dichloropropene	10061-02-6	ND	0.005
2-Chloroethylvinylether	100-75-8	ND	0.003
Bromoform	75-25-2	ND	0.003
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.004
Tetrachloroethene	127-18-4	ND	0.004
Toluene	108-88-3	0.004	0.002
Chlorobenzene	108-90-7	ND	0.003
Ethylbenzene	100-41-4	ND	0.003

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry  
(continued)

Client Reference: 33508.00

Sample Identification: BH-11-F (25)

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
1,3-Dichlorobenzene	541-73-7	ND	0.003
1,2-Dichlorobenzene	95-50-1	ND	0.003
1,4-Dichlorobenzene	106-46-7	ND	0.003
Freon 113	76-13-1	ND	0.003
Total Xylenes	1330-20-7	ND	0.003
Acetone	67-64-1	ND	0.02
2-Butanone	78-93-3	ND	0.02
4-Methyl-2-pentanone	108-10-1	ND	0.02
2-Hexanone	591-78-6	ND	0.02
Vinyl acetate	108-05-4	ND	0.01
Carbon disulfide	75-15-0	ND	0.003
Styrene	100-42-5	ND	0.003
Acrolein	107-02-8	ND	0.01
Acrylonitrile	107-13-1	ND	0.01

ND Not detected at or above limit of detection

-- Information not available or not applicable



Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.06

Sample Identification:	BH-11-G (30)	Date Sampled:	01/31/91
Lab Number:	9102006-14A	Date Received:	02/01/91
Sample Matrix/Media:	SOIL	Date Prepared:	02/07/91
Analytical Method:	EPA 8240 (Low Level)	Date Analyzed:	02/07/91
Preparation Method:	EPA 5030		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Purgeable Organics</u>			
Chloromethane	74-87-3	ND	0.01
Bromomethane	74-83-9	ND	0.004
Vinyl chloride	75-01-4	ND	0.004
Chloroethane	75-00-3	ND	0.004
Methylene chloride	75-09-2	ND	0.01
Trichlorofluoromethane	75-69-4	ND	0.003
1,1-Dichloroethene	75-35-4	ND	0.003
1,1-Dichloroethane	75-35-3	ND	0.003
Trans-1,2-Dichloroethene	156-60-5	ND	0.003
Cis-1,2-Dichloroethene	156-59-2	ND	0.003
1,2-Dichloroethene (total)	540-59-0	ND	0.003
Chloroform	67-66-3	ND	0.003
1,2-Dichloroethane	107-06-2	ND	0.003
1,1,1-Trichloroethane	71-55-6	ND	0.003
Carbon tetrachloride	56-23-5	ND	0.003
Bromodichloromethane	75-27-4	ND	0.003
1,2-Dichloropropane	78-87-5	ND	0.003
Cis-1,3-Dichloropropene	10061-01-5	ND	0.003
Trichloroethene	79-01-6	ND	0.004
Benzene	71-43-2	ND	0.002
Dibromochloromethane	124-48-1	ND	0.002
1,1,2-Trichloroethane	79-00-5	ND	0.003
Trans-1,3-Dichloropropene	10061-02-6	ND	0.005
2-Chloroethylvinylether	100-75-8	ND	0.003
Bromoform	75-25-2	ND	0.003
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.004
Tetrachloroethene	127-18-4	ND	0.004
Toluene	108-88-3	ND	0.002
Chlorobenzene	108-90-7	ND	0.003
Ethylbenzene	100-41-4	ND	0.003

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry  
(continued)

Client Reference: 33508.00

Sample Identification: BH-11-G (30)

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
1,3-Dichlorobenzene	541-73-7	ND	0.003
1,2-Dichlorobenzene	95-50-1	ND	0.003
1,4-Dichlorobenzene	106-46-7	ND	0.003
Freon 113	76-13-1	ND	0.003
Total Xylenes	1330-20-7	ND	0.003
Acetone	67-64-1	ND	0.02
2-Butanone	78-93-3	ND	0.02
4-Methyl-2-pentanone	108-10-1	ND	0.02
2-Hexanone	591-78-6	ND	0.02
Vinyl acetate	108-05-4	ND	0.01
Carbon disulfide	75-15-0	ND	0.003
Styrene	100-42-5	ND	0.003
Acrolein	107-02-8	ND	0.01
Acrylonitrile	107-13-1	ND	0.01

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.06

Sample Identification:	METHOD BLANK	Date Sampled:	--
Lab Number:	9102006-15A	Date Received:	--
Sample Matrix/Media:	SOIL	Date Prepared:	02/06/91
Analytical Method:	EPA 8240 (Low Level)	Date Analyzed:	02/06/91
Preparation Method:	EPA 5030		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Purgeable Organics</u>			
Chloromethane	74-87-3	ND	0.01
Bromomethane	74-83-9	ND	0.004
Vinyl chloride	75-01-4	ND	0.004
Chloroethane	75-00-3	ND	0.004
Methylene chloride	75-09-2	ND	0.01
Trichlorofluoromethane	75-69-4	ND	0.003
1,1-Dichloroethene	75-35-4	ND	0.003
1,1-Dichloroethane	75-35-3	ND	0.003
Trans-1,2-Dichloroethene	156-60-5	ND	0.003
Cis-1,2-Dichloroethene	156-59-2	ND	0.003
1,2-Dichloroethene (total)	540-59-0	ND	0.003
Chloroform	67-66-3	ND	0.003
1,2-Dichloroethane	107-06-2	ND	0.003
1,1,1-Trichloroethane	71-55-6	ND	0.003
Carbon tetrachloride	56-23-5	ND	0.003
Bromodichloromethane	75-27-4	ND	0.003
1,2-Dichloropropane	78-87-5	ND	0.003
Cis-1,3-Dichloropropene	10061-01-5	ND	0.003
Trichloroethene	79-01-6	ND	0.004
Benzene	71-43-2	ND	0.002
Dibromochloromethane	124-48-1	ND	0.002
1,1,2-Trichloroethane	79-00-5	ND	0.003
Trans-1,3-Dichloropropene	10061-02-6	ND	0.005
2-Chloroethylvinylether	100-75-8	ND	0.003
Bromoform	75-25-2	ND	0.003
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.004
Tetrachloroethene	127-18-4	ND	0.004
Toluene	108-88-3	ND	0.002
Chlorobenzene	108-90-7	ND	0.003
Ethylbenzene	100-41-4	ND	0.003

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry  
(continued)

Client Reference: 33508.00

Sample Identification: METHOD BLANK

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
1,3-Dichlorobenzene	541-73-7	ND	0.003
1,2-Dichlorobenzene	95-50-1	ND	0.003
1,4-Dichlorobenzene	106-46-7	ND	0.003
Freon 113	76-13-1	ND	0.003
Total Xylenes	1330-20-7	ND	0.003
Acetone	67-64-1	ND	0.02
2-Butanone	78-93-3	ND	0.02
4-Methyl-2-pentanone	108-10-1	ND	0.02
2-Hexanone	591-78-6	ND	0.02
Vinyl acetate	108-05-4	ND	0.01
Carbon disulfide	75-15-0	ND	0.003
Styrene	100-42-5	ND	0.003
Acrolein	107-02-8	ND	0.01
Acrylonitrile	107-13-1	ND	0.01

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.06

Sample Identification: See below      Date Sampled: 01/31/91  
Lab Number: 9102006      Date Received: 02/01/91  
Sample Matrix/Media: Soil      Date Analyzed: 02/05/91  
Analytical Method: EPA 418.1 (Modified)

Laboratory No.	Sample Identification	Total Recoverable Petroleum Hydrocarbons (mg/kg)
-01	MW-5-A (1)	30
-02	MW-5-B (5)	30
-03	MW-5-C (10)	30
-04	MW-5-D (15)	20
-05	MW-5-E (20)	20
-06	MW-5-F (25)	20
-07	MW-5-G (30)	20
-08	BH-11-A (1)	20
-09	BH-11-B (5)	20
-10	BH-11-C (10)	20
-11	BH-11-D (15)	90
-12	BH-11-E (20)	20
-13	BH-11-F (25)	20
-14	BH-11-G (30)	20
-MB	Method Blank	<10

Limit of Detection: 10

ND = Not detected at or above limit of detection

# Clayton

ENVIRONMENTAL  
CONSULTANTS

A Marsh & Mittenman Company

## REQUEST FOR LABORATORY ANALYTICAL SERVICES

STRODY CO.

For Clayton Use Only

Page

01

Project No.

Batch No.

Client No.

Date Logged In 2-1-91 By TS

Purchase Order No.

Client Job No. 335080

REPORT RESULTS TO  
Name GUY ROMINE  
Company CYPRRESS, CA  
Mailing Address  
City, State, Zip  
Telephone No. Telefax No.

Title Dept. EE

SEND INVOICE TO

Name  
Company  
Address  
City, State, Zip

NAME

Dept.

Date Results Required: Rush Charges Authorized? ☐ Yes ☒ No

Special Instructions: (method, limit of detection, etc.)

FAK RESULTS

Explanation of Preservation: NONE

### CLIENT SAMPLE IDENTIFICATION

DATE SAMPLED

MATRIX/MEDIA

AIR VOLUME (specify units)

Number of Containers

0240  
418.1

FOR LAB USE ONLY

ANALYSIS REQUESTED  
(Enter an 'X' in the box below to indicate request; Enter a 'P' if Preservative added)

CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	MATRIX/MEDIA	AIR VOLUME (specify units)	Number of Containers	ANALYSIS REQUESTED
MW-5-A (1)	1-31-91	Soil	B.Cone	1	X
MW-5-B (5)				1	X
MW-5-C (10)				1	X
MW-5-D (15)				1	X
MW-5-E (20)				1	X
MW-5-F (25)				1	X
MW-5-G (30)				1	X
BH-11-A (11)				1	X
BH-11-B (5)				1	X
BH-11-C (10)	1-31-91	Soil		1	X
Relinquished by: G.H. ROMINE	Date/Time 1/31/91, 15:15				
Relinquished by:	Date/Time				
Method of Shipment:					
Authorized by: G.H. ROMINE	Date 1/31/91				
(Client Signature Must Accompany Request)					

Received by:

Received at Lab by: Terry Davis

Sample Condition Upon Receipt: ☒ Acceptable ☐ Other (explain)

Date/Time 2/1/91, 10:30 AM

Please return completed form and samples to one of the Clayton Environmental Consultants, Inc. labs listed below:

22345 Roethel Drive  
Novi, MI 48050  
(313) 344-1770

Raritan Center  
160 Fieldcrest Ave  
Edison, NJ 08837

400 Chastain Center Blvd., N.W.  
Suite 490  
Kennesaw, GA 30144

1252 Quarry Lane  
Pleasanton, CA 94566  
(415) 426-2600

### DISTRIBUTION:

WHITE - Clayton Laboratory  
YELLOW - Clayton Accounting  
PINK - Client Copy

# Clayton

ENVIRONMENTAL  
CONSULTANTS

A March & McLeannan Company

## REQUEST FOR LABORATORY ANALYTICAL SERVICES

STODDY CO.

For Clayton Use Only Page 1 of 2

Project No.

Batch No. 9102006

Client No.

Date Logged In 2/1/91 By TS

Purchase Order No.

Client Job No.

Name STODDY CO. Title \_\_\_\_\_  
Company STODDY CO. Dept. EE  
Mailing Address \_\_\_\_\_  
City, State, Zip \_\_\_\_\_  
Telephone No. \_\_\_\_\_ Telefax No. \_\_\_\_\_

SEND INVOICE TO  
Name \_\_\_\_\_  
Company \_\_\_\_\_  
Address \_\_\_\_\_  
City, State, Zip \_\_\_\_\_

Same

Same

Dept.

Date Results Required: 14-DAYS Rush Charges Authorized? ☐ Yes ☒ No

Phone Results ☐

Special Instructions: (method, limit of detection, etc.)

FAIR RESULTS

Samples are:  
(check if applicable)  
☐ Drinking Water  
☐ Collected in the State of New York

Explanation of Preservative: NONE

CLIENT SAMPLE IDENTIFICATION

Number of Containers

0240  
418.1

ANALYSIS REQUESTED  
(Enter an 'X' in the box below to indicate request. Enter a 'P' if Preservative added.)

FOR LAB USE ONLY

DATE SAMPLED	MATRIX/MEDIA	AIR VOLUME (specify units)	Number of Containers	ANALYSIS REQUESTED	FOR LAB USE ONLY
BH-11-D (15)	1-31-91	5012	B-Core	1	11 A
BH-11-E (20)	↓	↓	↓	↓	12 A
BH-11-F (25)	1-31-91	5012	↓	↓	13 A
BH-11-G (30)	↓	↓	↓	↓	14 A

Relinquished by: AK ROMINE Date/Time: 1/31/91 15:15  
Relinquished by: AK ROMINE Date/Time: 1/31/91 15:15  
Method of Shipment: \_\_\_\_\_  
Received at Lab by: Tony Stoddy Date/Time: 2/1/91 10:30 AM  
Sample Condition Upon Receipt: ☒ Acceptable ☐ Other (explain)

Authorized by: AK ROMINE Date 1/31/91  
(Client Signature Must Accompany Request)

Please return completed form and samples to one of the Clayton Environmental Consultants, Inc. labs listed below:

22345 Roethel Drive Raritan Center 400 Chastain Center Blvd., N.W. 1252 Quarry Lane  
Novi, MI 48050 160 Fieldcrest Ave. Suite 490 Pleasanton, CA 94566  
(313) 344-1770 Edison, NJ 08837 Kennesaw, GA 30144 (415) 426-2600  
(201) 225-6040 (404) 499-7500

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6/90

1252 Quarry Lane  
P.O. Box 9019  
Pleasanton, CA 94566  
(415) 426-2600  
Fax (415) 426-0106

**Clayton**  
ENVIRONMENTAL  
CONSULTANTS

February 19, 1991

Mr. Guy Romine  
CLAYTON ENVIRONMENTAL CONSULTANTS, INC.  
5785 Corporate Ave., Suite 150  
Cypress, CA 90630

PARTIAL REPORT  
Client Ref. 33508.00  
Clayton Project No. 91020.47

Dear Mr. Romine:

Attached is our analytical laboratory report for the samples received on February 6, 1991. Results for EPA 8240 and EPA 418.1 are presented in this report. Metals results, which were requested on February 18, 1991 will be available in one week. A copy of the Chain-of-Custody form acknowledging receipt of these samples is attached.

Please note that any unused portion of the samples will be disposed of 30 days after the date of this report, unless you have requested otherwise.

We appreciate the opportunity to be of assistance to you. If you have any questions, please contact Maryann Gambino, Client Services Supervisor, at (415) 426-2657.

Sincerely,



Ronald H. Peters, CIH  
Director, Laboratory Services  
Western Operations

RHP/tb  
Attachments



Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.47

Sample Identification:	BH-10-B	Date Sampled:	02/01/91
Lab Number:	9102047-01A	Date Received:	02/06/91
Sample Matrix/Media:	SOIL	Date Prepared:	02/12/91
Analytical Method:	EPA 8240 (Low Level)	Date Analyzed:	02/12/91
Preparation Method:	EPA 5030		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Purgeable Organics</u>			
Chloromethane	74-87-3	ND	0.05
Bromomethane	74-83-9	ND	0.02
Vinyl chloride	75-01-4	ND	0.02
Chloroethane	75-00-3	ND	0.02
Methylene chloride	75-09-2	ND	0.05
Trichlorofluoromethane	75-69-4	ND	0.02
1,1-Dichloroethene	75-35-4	ND	0.02
1,1-Dichloroethane	75-35-3	ND	0.02
Trans-1,2-Dichloroethene	156-60-5	ND	0.02
Cis-1,2-Dichloroethene	156-59-2	ND	0.02
1,2-Dichloroethene (total)	540-59-0	ND	0.02
Chloroform	67-66-3	ND	0.02
1,2-Dichloroethane	107-06-2	ND	0.02
1,1,1-Trichloroethane	71-55-6	ND	0.02
Carbon tetrachloride	56-23-5	ND	0.02
Bromodichloromethane	75-27-4	ND	0.02
1,2-Dichloropropane	78-87-5	ND	0.02
Cis-1,3-Dichloropropene	10061-01-5	ND	0.02
Trichloroethene	79-01-6	ND	0.02
Benzene	71-43-2	ND	0.01
Dibromochloromethane	124-48-1	ND	0.01
1,1,2-Trichloroethane	79-00-5	ND	0.02
Trans-1,3-Dichloropropene	10061-02-6	ND	0.03
2-Chloroethylvinylether	100-75-8	ND	0.02
Bromoform	75-25-2	ND	0.02
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.02
Tetrachloroethene	127-18-4	0.04	0.02
Toluene	108-88-3	0.04	0.01
Chlorobenzene	108-90-7	ND	0.02
Ethylbenzene	100-41-4	ND	0.02

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry  
(continued)

Client Reference: 33508.00

Sample Identification: BH-10-B

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
1,3-Dichlorobenzene	541-73-7	ND	0.02
1,2-Dichlorobenzene	95-50-1	ND	0.02
1,4-Dichlorobenzene	106-46-7	ND	0.02
Freon 113	76-13-1	ND	0.02
Total Xylenes	1330-20-7	ND	0.02
Acetone	67-64-1	ND	0.2
2-Butanone	78-93-3	ND	0.1
4-Methyl-2-pentanone	108-10-1	ND	0.1
2-Hexanone	591-78-6	ND	0.1
Vinyl acetate	108-05-4	ND	0.05
Carbon disulfide	75-15-0	ND	0.02
Styrene	100-42-5	ND	0.02
Acrolein	107-02-8	ND	0.05
Acrylonitrile	107-13-1	ND	0.05

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.47

Sample Identification:	BH-10-C	Date Sampled:	02/01/91
Lab Number:	9102047-02A	Date Received:	02/06/91
Sample Matrix/Media:	SOIL	Date Prepared:	02/12/91
Analytical Method:	EPA 8240 (Low Level)	Date Analyzed:	02/12/91
Preparation Method:	EPA 5030		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Purgeable Organics</u>			
Chloromethane	74-87-3	ND	0.05
Bromomethane	74-83-9	ND	0.02
Vinyl chloride	75-01-4	ND	0.02
Chloroethane	75-00-3	ND	0.02
Methylene chloride	75-09-2	ND	0.05
Trichlorofluoromethane	75-69-4	ND	0.02
1,1-Dichloroethene	75-35-4	ND	0.02
1,1-Dichloroethane	75-35-3	ND	0.02
Trans-1,2-Dichloroethene	156-60-5	ND	0.02
Cis-1,2-Dichloroethene	156-59-2	ND	0.02
1,2-Dichloroethene (total)	540-59-0	ND	0.02
Chloroform	67-66-3	ND	0.02
1,2-Dichloroethane	107-06-2	ND	0.02
1,1,1-Trichloroethane	71-55-6	ND	0.02
Carbon tetrachloride	56-23-5	ND	0.02
Bromodichloromethane	75-27-4	ND	0.02
1,2-Dichloropropane	78-87-5	ND	0.02
Cis-1,3-Dichloropropene	10061-01-5	ND	0.02
Trichloroethene	79-01-6	ND	0.02
Benzene	71-43-2	ND	0.01
Dibromochloromethane	124-48-1	ND	0.01
1,1,2-Trichloroethane	79-00-5	ND	0.02
Trans-1,3-Dichloropropene	10061-02-6	ND	0.03
2-Chloroethylvinylether	100-75-8	ND	0.02
Bromoform	75-25-2	ND	0.02
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.02
Tetrachloroethene	127-18-4	ND	0.02
Toluene	108-88-3	0.82	0.01
Chlorobenzene	108-90-7	ND	0.02
Ethylbenzene	100-41-4	ND	0.02

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry  
(continued)

Client Reference: 33508.00

Sample Identification: BH-10-C

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
1,3-Dichlorobenzene	541-73-7	ND	0.02
1,2-Dichlorobenzene	95-50-1	ND	0.02
1,4-Dichlorobenzene	106-46-7	ND	0.02
Freon 113	76-13-1	ND	0.02
Total Xylenes	1330-20-7	0.07	0.02
Acetone	67-64-1	ND	0.2
2-Butanone	78-93-3	ND	0.1
4-Methyl-2-pentanone	108-10-1	ND	0.1
2-Hexanone	591-78-6	ND	0.1
Vinyl acetate	108-05-4	ND	0.05
Carbon disulfide	75-15-0	ND	0.02
Styrene	100-42-5	ND	0.02
Acrolein	107-02-8	ND	0.05
Acrylonitrile	107-13-1	ND	0.05

ND Not detected at or above limit of detection

-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.47

Sample Identification:	BH-10-D	Date Sampled:	02/01/91
Lab Number:	9102047-03A	Date Received:	02/06/91
Sample Matrix/Media:	SOIL	Date Prepared:	02/13/91
Analytical Method:	EPA 8240 (Low Level)	Date Analyzed:	02/13/91
Preparation Method:	EPA 5030		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Purgeable Organics</u>			
Chloromethane	74-87-3	ND	0.05
Bromomethane	74-83-9	ND	0.02
Vinyl chloride	75-01-4	ND	0.02
Chloroethane	75-00-3	ND	0.02
Methylene chloride	75-09-2	ND	0.05
Trichlorofluoromethane	75-69-4	ND	0.02
1,1-Dichloroethene	75-35-4	ND	0.02
1,1-Dichloroethane	75-35-3	ND	0.02
Trans-1,2-Dichloroethene	156-60-5	ND	0.02
Cis-1,2-Dichloroethene	156-59-2	0.02	0.02
1,2-Dichloroethene (total)	540-59-0	0.02	0.02
Chloroform	67-66-3	ND	0.02
1,2-Dichloroethane	107-06-2	ND	0.02
1,1,1-Trichloroethane	71-55-6	ND	0.02
Carbon tetrachloride	56-23-5	ND	0.02
Bromodichloromethane	75-27-4	ND	0.02
1,2-Dichloropropane	78-87-5	ND	0.02
Cis-1,3-Dichloropropene	10061-01-5	ND	0.02
Trichloroethene	79-01-6	ND	0.02
Benzene	71-43-2	ND	0.01
Dibromochloromethane	124-48-1	ND	0.01
1,1,2-Trichloroethane	79-00-5	ND	0.02
Trans-1,3-Dichloropropene	10061-02-6	ND	0.03
2-Chloroethylvinylether	100-75-8	ND	0.02
Bromoform	75-25-2	ND	0.02
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.02
Tetrachloroethene	127-18-4	0.04	0.02
Toluene	108-88-3	8.8	0.01
Chlorobenzene	108-90-7	ND	0.02
Ethylbenzene	100-41-4	0.02	0.02

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry  
(continued)

Client Reference: 33508.00

Sample Identification: BH-10-D

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
1,3-Dichlorobenzene	541-73-7	ND	0.02
1,2-Dichlorobenzene	95-50-1	ND	0.02
1,4-Dichlorobenzene	106-46-7	ND	0.02
Freon 113	76-13-1	ND	0.02
Total Xylenes	1330-20-7	0.17	0.02
Acetone	67-64-1	ND	0.2
2-Butanone	78-93-3	ND	0.1
4-Methyl-2-pentanone	108-10-1	ND	0.1
2-Hexanone	591-78-6	ND	0.1
Vinyl acetate	108-05-4	ND	0.05
Carbon disulfide	75-15-0	ND	0.02
Styrene	100-42-5	ND	0.02
Acrolein	107-02-8	ND	0.05
Acrylonitrile	107-13-1	ND	0.05

ND Not detected at or above limit of detection

-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.47

Sample Identification:	BH-10-E	Date Sampled:	02/01/91
Lab Number:	9102047-04A	Date Received:	02/06/91
Sample Matrix/Media:	SOIL	Date Prepared:	02/12/91
Analytical Method:	EPA 8240 (Low Level)	Date Analyzed:	02/12/91
Preparation Method:	EPA 5030		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Purgeable Organics</u>			
Chloromethane	74-87-3	ND	0.05
Bromomethane	74-83-9	ND	0.02
Vinyl chloride	75-01-4	ND	0.02
Chloroethane	75-00-3	ND	0.02
Methylene chloride	75-09-2	ND	0.05
Trichlorofluoromethane	75-69-4	ND	0.02
1,1-Dichloroethene	75-35-4	ND	0.02
1,1-Dichloroethane	75-35-3	ND	0.02
Trans-1,2-Dichloroethene	156-60-5	ND	0.02
Cis-1,2-Dichloroethene	156-59-2	ND	0.02
1,2-Dichloroethene (total)	540-59-0	ND	0.02
Chloroform	67-66-3	ND	0.02
1,2-Dichloroethane	107-06-2	ND	0.02
1,1,1-Trichloroethane	71-55-6	ND	0.02
Carbon tetrachloride	56-23-5	ND	0.02
Bromodichloromethane	75-27-4	ND	0.02
1,2-Dichloropropane	78-87-5	ND	0.02
Cis-1,3-Dichloropropene	10061-01-5	ND	0.02
Trichloroethene	79-01-6	ND	0.02
Benzene	71-43-2	ND	0.01
Dibromochloromethane	124-48-1	ND	0.01
1,1,2-Trichloroethane	79-00-5	ND	0.02
Trans-1,3-Dichloropropene	10061-02-6	ND	0.03
2-Chloroethylvinylether	100-75-8	ND	0.02
Bromoform	75-25-2	ND	0.02
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.02
Tetrachloroethene	127-18-4	ND	0.02
Toluene	108-88-3	0.02	0.01
Chlorobenzene	108-90-7	ND	0.02
Ethylbenzene	100-41-4	ND	0.02

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry  
(continued)

Client Reference: 33508.00

Sample Identification: BH-10-E

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
1,3-Dichlorobenzene	541-73-7	ND	0.02
1,2-Dichlorobenzene	95-50-1	ND	0.02
1,4-Dichlorobenzene	106-46-7	ND	0.02
Freon 113	76-13-1	ND	0.02
Total Xylenes	1330-20-7	ND	0.02
Acetone	67-64-1	0.20	0.02
2-Butanone	78-93-3	ND	0.1
4-Methyl-2-pentanone	108-10-1	ND	0.1
2-Hexanone	591-78-6	ND	0.1
Vinyl acetate	108-05-4	ND	0.05
Carbon disulfide	75-15-0	ND	0.02
Styrene	100-42-5	ND	0.02
Acrolein	107-02-8	ND	0.05
Acrylonitrile	107-13-1	ND	0.05

ND Not detected at or above limit of detection  
-- Information not available or not applicable



Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.47

Sample Identification:	BH-10-F	Date Sampled:	02/01/91
Lab Number:	9102047-05A	Date Received:	02/06/91
Sample Matrix/Media:	SOIL	Date Prepared:	02/12/91
Analytical Method:	EPA 8240 (Low Level)	Date Analyzed:	02/12/91
Preparation Method:	EPA 5030		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Purgeable Organics</u>			
Chloromethane	74-87-3	ND	0.01
Bromomethane	74-83-9	ND	0.004
Vinyl chloride	75-01-4	ND	0.004
Chloroethane	75-00-3	ND	0.004
Methylene chloride	75-09-2	ND	0.01
Trichlorofluoromethane	75-69-4	ND	0.003
1,1-Dichloroethene	75-35-4	ND	0.003
1,1-Dichloroethane	75-35-3	ND	0.003
Trans-1,2-Dichloroethene	156-60-5	ND	0.003
Cis-1,2-Dichloroethene	156-59-2	ND	0.003
1,2-Dichloroethene (total)	540-59-0	ND	0.003
Chloroform	67-66-3	ND	0.003
1,2-Dichloroethane	107-06-2	ND	0.003
1,1,1-Trichloroethane	71-55-6	ND	0.003
Carbon tetrachloride	56-23-5	ND	0.003
Bromodichloromethane	75-27-4	ND	0.003
1,2-Dichloropropane	78-87-5	ND	0.003
Cis-1,3-Dichloropropene	10061-01-5	ND	0.003
Trichloroethene	79-01-6	ND	0.004
Benzene	71-43-2	ND	0.002
Dibromochloromethane	124-48-1	ND	0.002
1,1,2-Trichloroethane	79-00-5	ND	0.003
Trans-1,3-Dichloropropene	10061-02-6	ND	0.005
2-Chloroethylvinylether	100-75-8	ND	0.003
Bromoform	75-25-2	ND	0.003
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.004
Tetrachloroethene	127-18-4	ND	0.004
Toluene	108-88-3	ND	0.002
Chlorobenzene	108-90-7	ND	0.003
Ethylbenzene	100-41-4	ND	0.003

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry  
(continued)

Client Reference: 33508.00

Sample Identification: BH-10-F

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
1,3-Dichlorobenzene	541-73-7	ND	0.003
1,2-Dichlorobenzene	95-50-1	ND	0.003
1,4-Dichlorobenzene	106-46-7	ND	0.003
Freon 113	76-13-1	ND	0.003
Total Xylenes	1330-20-7	ND	0.003
Acetone	67-64-1	ND	0.03
2-Butanone	78-93-3	ND	0.02
4-Methyl-2-pentanone	108-10-1	ND	0.02
2-Hexanone	591-78-6	ND	0.02
Vinyl acetate	108-05-4	ND	0.01
Carbon disulfide	75-15-0	ND	0.003
Styrene	100-42-5	ND	0.003
Acrolein	107-02-8	ND	0.01
Acrylonitrile	107-13-1	ND	0.01

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.47

Sample Identification:	BH-12-A	Date Sampled:	02/01/91
Lab Number:	9102047-06A	Date Received:	02/06/91
Sample Matrix/Media:	SOIL	Date Prepared:	02/12/91
Analytical Method:	EPA 8240 (Low Level)	Date Analyzed:	02/12/91
Preparation Method:	EPA 5030		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Purgeable Organics</u>			
Chloromethane	74-87-3	ND	0.01
Bromomethane	74-83-9	ND	0.004
Vinyl chloride	75-01-4	ND	0.004
Chloroethane	75-00-3	ND	0.004
Methylene chloride	75-09-2	ND	0.01
Trichlorofluoromethane	75-69-4	ND	0.003
1,1-Dichloroethene	75-35-4	ND	0.003
1,1-Dichloroethane	75-35-3	ND	0.003
Trans-1,2-Dichloroethene	156-60-5	0.005	0.003
Cis-1,2-Dichloroethene	156-59-2	0.40	0.003
1,2-Dichloroethene (total)	540-59-0	0.41	0.003
Chloroform	67-66-3	ND	0.003
1,2-Dichloroethane	107-06-2	ND	0.003
1,1,1-Trichloroethane	71-55-6	ND	0.003
Carbon tetrachloride	56-23-5	ND	0.003
Bromodichloromethane	75-27-4	ND	0.003
1,2-Dichloropropane	78-87-5	ND	0.003
Cis-1,3-Dichloropropene	10061-01-5	ND	0.003
Trichloroethene	79-01-6	0.062	0.004
Benzene	71-43-2	ND	0.002
Dibromochloromethane	124-48-1	ND	0.002
1,1,2-Trichloroethane	79-00-5	ND	0.003
Trans-1,3-Dichloropropene	10061-02-6	ND	0.005
2-Chloroethylvinylether	100-75-8	ND	0.003
Bromoform	75-25-2	ND	0.003
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.004
Tetrachloroethene	127-18-4	0.14	0.004
Toluene	108-88-3	0.026	0.002
Chlorobenzene	108-90-7	ND	0.003
Ethylbenzene	100-41-4	ND	0.003

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry  
(continued)

Client Reference: 33508.00

Sample Identification: BH-12-A

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
1,3-Dichlorobenzene	541-73-7	ND	0.003
1,2-Dichlorobenzene	95-50-1	ND	0.003
1,4-Dichlorobenzene	106-46-7	ND	0.003
Freon 113	76-13-1	ND	0.003
Total Xylenes	1330-20-7	ND	0.003
Acetone	67-64-1	0.06	0.03
2-Butanone	78-93-3	ND	0.02
4-Methyl-2-pentanone	108-10-1	ND	0.02
2-Hexanone	591-78-6	ND	0.02
Vinyl acetate	108-05-4	ND	0.01
Carbon disulfide	75-15-0	ND	0.003
Styrene	100-42-5	ND	0.003
Acrolein	107-02-8	ND	0.01
Acrylonitrile	107-13-1	ND	0.01

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.47

Sample Identification:	BH-12-B	Date Sampled:	02/01/91
Lab Number:	9102047-07A	Date Received:	02/06/91
Sample Matrix/Media:	SOIL	Date Prepared:	02/12/91
Analytical Method:	EPA 8240 (Low Level)	Date Analyzed:	02/13/91
Preparation Method:	EPA 5030		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Purgeable Organics</u>			
Chloromethane	74-87-3	ND	0.01
Bromomethane	74-83-9	ND	0.004
Vinyl chloride	75-01-4	ND	0.004
Chloroethane	75-00-3	ND	0.004
Methylene chloride	75-09-2	ND	0.01
Trichlorofluoromethane	75-69-4	ND	0.003
1,1-Dichloroethene	75-35-4	ND	0.003
1,1-Dichloroethane	75-35-3	ND	0.003
Trans-1,2-Dichloroethene	156-60-5	ND	0.003
Cis-1,2-Dichloroethene	156-59-2	0.005	0.003
1,2-Dichloroethene (total)	540-59-0	0.005	0.003
Chloroform	67-66-3	ND	0.003
1,2-Dichloroethane	107-06-2	ND	0.003
1,1,1-Trichloroethane	71-55-6	ND	0.003
Carbon tetrachloride	56-23-5	ND	0.003
Bromodichloromethane	75-27-4	ND	0.003
1,2-Dichloropropane	78-87-5	ND	0.003
Cis-1,3-Dichloropropene	10061-01-5	ND	0.003
Trichloroethene	79-01-6	ND	0.004
Benzene	71-43-2	ND	0.002
Dibromochloromethane	124-48-1	ND	0.002
1,1,2-Trichloroethane	79-00-5	ND	0.003
Trans-1,3-Dichloropropene	10061-02-6	ND	0.005
2-Chloroethylvinylether	100-75-8	ND	0.003
Bromoform	75-25-2	ND	0.003
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.004
Tetrachloroethene	127-18-4	0.014	0.004
Toluene	108-88-3	0.005	0.002
Chlorobenzene	108-90-7	ND	0.003
Ethylbenzene	100-41-4	ND	0.003

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry  
(continued)

Client Reference: 33508.00

Sample Identification: BH-12-B

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
1,3-Dichlorobenzene	541-73-7	ND	0.003
1,2-Dichlorobenzene	95-50-1	ND	0.003
1,4-Dichlorobenzene	106-46-7	ND	0.003
Freon 113	76-13-1	ND	0.003
Total Xylenes	1330-20-7	ND	0.003
Acetone	67-64-1	ND	0.03
2-Butanone	78-93-3	ND	0.02
4-Methyl-2-pentanone	108-10-1	ND	0.02
2-Hexanone	591-78-6	ND	0.02
Vinyl acetate	108-05-4	ND	0.01
Carbon disulfide	75-15-0	ND	0.003
Styrene	100-42-5	ND	0.003
Acrolein	107-02-8	ND	0.01
Acrylonitrile	107-13-1	ND	0.01

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.47

Sample Identification:	BH-12-C	Date Sampled:	02/01/91
Lab Number:	9102047-08A	Date Received:	02/06/91
Sample Matrix/Media:	SOIL	Date Prepared:	02/12/91
Analytical Method:	EPA 8240 (Low Level)	Date Analyzed:	02/12/91
Preparation Method:	EPA 5030		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Purgeable Organics</u>			
Chloromethane	74-87-3	ND	0.01
Bromomethane	74-83-9	ND	0.004
Vinyl chloride	75-01-4	ND	0.004
Chloroethane	75-00-3	ND	0.004
Methylene chloride	75-09-2	ND	0.01
Trichlorofluoromethane	75-69-4	ND	0.003
1,1-Dichloroethene	75-35-4	ND	0.003
1,1-Dichloroethane	75-35-3	ND	0.003
Trans-1,2-Dichloroethene	156-60-5	ND	0.003
Cis-1,2-Dichloroethene	156-59-2	ND	0.003
1,2-Dichloroethene (total)	540-59-0	ND	0.003
Chloroform	67-66-3	ND	0.003
1,2-Dichloroethane	107-06-2	ND	0.003
1,1,1-Trichloroethane	71-55-6	ND	0.003
Carbon tetrachloride	56-23-5	ND	0.003
Bromodichloromethane	75-27-4	ND	0.003
1,2-Dichloropropane	78-87-5	ND	0.003
Cis-1,3-Dichloropropene	10061-01-5	ND	0.003
Trichloroethene	79-01-6	ND	0.004
Benzene	71-43-2	ND	0.002
Dibromochloromethane	124-48-1	ND	0.002
1,1,2-Trichloroethane	79-00-5	ND	0.003
Trans-1,3-Dichloropropene	10061-02-6	ND	0.005
2-Chloroethylvinylether	100-75-8	ND	0.003
Bromoform	75-25-2	ND	0.003
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.004
Tetrachloroethene	127-18-4	ND	0.004
Toluene	108-88-3	0.005	0.002
Chlorobenzene	108-90-7	ND	0.003
Ethylbenzene	100-41-4	ND	0.003

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry  
(continued)

Client Reference: 33508.00

Sample Identification: BH-12-C

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
1,3-Dichlorobenzene	541-73-7	ND	0.003
1,2-Dichlorobenzene	95-50-1	ND	0.003
1,4-Dichlorobenzene	106-46-7	ND	0.003
Freon 113	76-13-1	ND	0.003
Total Xylenes	1330-20-7	ND	0.003
Acetone	67-64-1	ND	0.03
2-Butanone	78-93-3	ND	0.02
4-Methyl-2-pentanone	108-10-1	ND	0.02
2-Hexanone	591-78-6	ND	0.02
Vinyl acetate	108-05-4	ND	0.01
Carbon disulfide	75-15-0	ND	0.003
Styrene	100-42-5	ND	0.003
Acrolein	107-02-8	ND	0.01
Acrylonitrile	107-13-1	ND	0.01

ND Not detected at or above limit of detection

-- Information not available or not applicable



Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.47

Sample Identification:	BH-12-D	Date Sampled:	02/01/91
Lab Number:	9102047-09A	Date Received:	02/06/91
Sample Matrix/Media:	SOIL	Date Prepared:	02/12/91
Analytical Method:	EPA 8240 (Low Level)	Date Analyzed:	02/12/91
Preparation Method:	EPA 5030		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Purgeable Organics</u>			
Chloromethane	74-87-3	ND	0.01
Bromomethane	74-83-9	ND	0.004
Vinyl chloride	75-01-4	ND	0.004
Chloroethane	75-00-3	ND	0.004
Methylene chloride	75-09-2	ND	0.01
Trichlorofluoromethane	75-69-4	ND	0.003
1,1-Dichloroethene	75-35-4	ND	0.003
1,1-Dichloroethane	75-35-3	ND	0.003
Trans-1,2-Dichloroethene	156-60-5	ND	0.003
Cis-1,2-Dichloroethene	156-59-2	ND	0.003
1,2-Dichloroethene (total)	540-59-0	ND	0.003
Chloroform	67-66-3	ND	0.003
1,2-Dichloroethane	107-06-2	ND	0.003
1,1,1-Trichloroethane	71-55-6	ND	0.003
Carbon tetrachloride	56-23-5	ND	0.003
Bromodichloromethane	75-27-4	ND	0.003
1,2-Dichloropropane	78-87-5	ND	0.003
Cis-1,3-Dichloropropene	10061-01-5	ND	0.003
Trichloroethene	79-01-6	ND	0.004
Benzene	71-43-2	ND	0.002
Dibromochloromethane	124-48-1	ND	0.002
1,1,2-Trichloroethane	79-00-5	ND	0.003
Trans-1,3-Dichloropropene	10061-02-6	ND	0.005
2-Chloroethylvinylether	100-75-8	ND	0.003
Bromoform	75-25-2	ND	0.003
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.004
Tetrachloroethene	127-18-4	ND	0.004
Toluene	108-88-3	ND	0.002
Chlorobenzene	108-90-7	ND	0.003
Ethylbenzene	100-41-4	ND	0.003

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry  
(continued)

Client Reference: 33508.00

Sample Identification: BH-12-D

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
1,3-Dichlorobenzene	541-73-7	ND	0.003
1,2-Dichlorobenzene	95-50-1	ND	0.003
1,4-Dichlorobenzene	106-46-7	ND	0.003
Freon 113	76-13-1	ND	0.003
Total Xylenes	1330-20-7	ND	0.003
Acetone	67-64-1	ND	0.03
2-Butanone	78-93-3	ND	0.02
4-Methyl-2-pentanone	108-10-1	ND	0.02
2-Hexanone	591-78-6	ND	0.02
Vinyl acetate	108-05-4	ND	0.01
Carbon disulfide	75-15-0	ND	0.003
Styrene	100-42-5	ND	0.003
Acrolein	107-02-8	ND	0.01
Acrylonitrile	107-13-1	ND	0.01

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.47

Sample Identification:	BH-12-E	Date Sampled:	02/01/91
Lab Number:	9102047-10A	Date Received:	02/06/91
Sample Matrix/Media:	SOIL	Date Prepared:	02/13/91
Analytical Method:	EPA 8240 (Low Level)	Date Analyzed:	02/13/91
Preparation Method:	EPA 5030		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Purgeable Organics</u>			
Chloromethane	74-87-3	ND	0.01
Bromomethane	74-83-9	ND	0.004
Vinyl chloride	75-01-4	ND	0.004
Chloroethane	75-00-3	ND	0.004
Methylene chloride	75-09-2	ND	0.01
Trichlorofluoromethane	75-69-4	ND	0.003
1,1-Dichloroethene	75-35-4	ND	0.003
1,1-Dichloroethane	75-35-3	ND	0.003
Trans-1,2-Dichloroethene	156-60-5	ND	0.003
Cis-1,2-Dichloroethene	156-59-2	0.007	0.003
1,2-Dichloroethene (total)	540-59-0	0.007	0.003
Chloroform	67-66-3	ND	0.003
1,2-Dichloroethane	107-06-2	ND	0.003
1,1,1-Trichloroethane	71-55-6	ND	0.003
Carbon tetrachloride	56-23-5	ND	0.003
Bromodichloromethane	75-27-4	ND	0.003
1,2-Dichloropropane	78-87-5	ND	0.003
Cis-1,3-Dichloropropene	10061-01-5	ND	0.003
Trichloroethene	79-01-6	ND	0.004
Benzene	71-43-2	ND	0.002
Dibromochloromethane	124-48-1	ND	0.002
1,1,2-Trichloroethane	79-00-5	ND	0.003
Trans-1,3-Dichloropropene	10061-02-6	ND	0.005
2-Chloroethylvinylether	100-75-8	ND	0.003
Bromoform	75-25-2	ND	0.003
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.004
Tetrachloroethene	127-18-4	0.010	0.004
Toluene	108-88-3	0.002	0.002
Chlorobenzene	108-90-7	ND	0.003
Ethylbenzene	100-41-4	ND	0.003

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry  
(continued)

Client Reference: 33508.00

Sample Identification: BH-12-E

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
1,3-Dichlorobenzene	541-73-7	ND	0.003
1,2-Dichlorobenzene	95-50-1	ND	0.003
1,4-Dichlorobenzene	106-46-7	ND	0.003
Freon 113	76-13-1	ND	0.003
Total Xylenes	1330-20-7	ND	0.003
Acetone	67-64-1	ND	0.03
2-Butanone	78-93-3	ND	0.02
4-Methyl-2-pentanone	108-10-1	ND	0.02
2-Hexanone	591-78-6	ND	0.02
Vinyl acetate	108-05-4	ND	0.01
Carbon disulfide	75-15-0	ND	0.003
Styrene	100-42-5	ND	0.003
Acrolein	107-02-8	ND	0.01
Acrylonitrile	107-13-1	ND	0.01

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.47

Sample Identification:	BH-12-F	Date Sampled:	02/01/91
Lab Number:	9102047-11A	Date Received:	02/06/91
Sample Matrix/Media:	SOIL	Date Prepared:	02/13/91
Analytical Method:	EPA 8240 (Low Level)	Date Analyzed:	02/13/91
Preparation Method:	EPA 5030		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Purgeable Organics</u>			
Chloromethane	74-87-3	ND	0.01
Bromomethane	74-83-9	ND	0.004
Vinyl chloride	75-01-4	ND	0.004
Chloroethane	75-00-3	ND	0.004
Methylene chloride	75-09-2	ND	0.01
Trichlorofluoromethane	75-69-4	ND	0.003
1,1-Dichloroethene	75-35-4	ND	0.003
1,1-Dichloroethane	75-35-3	ND	0.003
Trans-1,2-Dichloroethene	156-60-5	ND	0.003
Cis-1,2-Dichloroethene	156-59-2	0.008	0.003
1,2-Dichloroethene (total)	540-59-0	0.008	0.003
Chloroform	67-66-3	ND	0.003
1,2-Dichloroethane	107-06-2	ND	0.003
1,1,1-Trichloroethane	71-55-6	ND	0.003
Carbon tetrachloride	56-23-5	ND	0.003
Bromodichloromethane	75-27-4	ND	0.003
1,2-Dichloropropane	78-87-5	ND	0.003
Cis-1,3-Dichloropropene	10061-01-5	ND	0.003
Trichloroethene	79-01-6	ND	0.004
Benzene	71-43-2	ND	0.002
Dibromochloromethane	124-48-1	ND	0.002
1,1,2-Trichloroethane	79-00-5	ND	0.003
Trans-1,3-Dichloropropene	10061-02-6	ND	0.005
2-Chloroethylvinylether	100-75-8	ND	0.003
Bromoform	75-25-2	ND	0.003
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.004
Tetrachloroethene	127-18-4	0.004	0.004
Toluene	108-88-3	ND	0.002
Chlorobenzene	108-90-7	ND	0.003
Ethylbenzene	100-41-4	ND	0.003

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry  
(continued)

Client Reference: 33508.00

Sample Identification: BH-12-F

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
1,3-Dichlorobenzene	541-73-7	ND	0.003
1,2-Dichlorobenzene	95-50-1	ND	0.003
1,4-Dichlorobenzene	106-46-7	ND	0.003
Freon 113	76-13-1	ND	0.003
Total Xylenes	1330-20-7	ND	0.003
Acetone	67-64-1	ND	0.03
2-Butanone	78-93-3	ND	0.02
4-Methyl-2-pentanone	108-10-1	ND	0.02
2-Hexanone	591-78-6	ND	0.02
Vinyl acetate	108-05-4	ND	0.01
Carbon disulfide	75-15-0	ND	0.003
Styrene	100-42-5	ND	0.003
Acrolein	107-02-8	ND	0.01
Acrylonitrile	107-13-1	ND	0.01

ND Not detected at or above limit of detection

-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.47

Sample Identification:	BH-13-A	Date Sampled:	02/01/91
Lab Number:	9102047-12A	Date Received:	02/06/91
Sample Matrix/Media:	SOIL	Date Prepared:	02/13/91
Analytical Method:	EPA 8240 (Low Level)	Date Analyzed:	02/13/91
Preparation Method:	EPA 5030		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Purgeable Organics</u>			
Chloromethane	74-87-3	ND	0.01
Bromomethane	74-83-9	ND	0.004
Vinyl chloride	75-01-4	ND	0.004
Chloroethane	75-00-3	ND	0.004
Methylene chloride	75-09-2	ND	0.01
Trichlorofluoromethane	75-69-4	ND	0.003
1,1-Dichloroethene	75-35-4	ND	0.003
1,1-Dichloroethane	75-35-3	ND	0.003
Trans-1,2-Dichloroethene	156-60-5	ND	0.003
Cis-1,2-Dichloroethene	156-59-2	0.50	0.003
1,2-Dichloroethene (total)	540-59-0	0.50	0.003
Chloroform	67-66-3	ND	0.003
1,2-Dichloroethane	107-06-2	ND	0.003
1,1,1-Trichloroethane	71-55-6	ND	0.003
Carbon tetrachloride	56-23-5	ND	0.003
Bromodichloromethane	75-27-4	ND	0.003
1,2-Dichloropropane	78-87-5	ND	0.003
Cis-1,3-Dichloropropene	10061-01-5	ND	0.003
Trichloroethene	79-01-6	0.011	0.004
Benzene	71-43-2	ND	0.002
Dibromochloromethane	124-48-1	ND	0.002
1,1,2-Trichloroethane	79-00-5	ND	0.003
Trans-1,3-Dichloropropene	10061-02-6	ND	0.005
2-Chloroethylvinylether	100-75-8	ND	0.003
Bromoform	75-25-2	ND	0.003
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.004
Tetrachloroethene	127-18-4	0.17	0.004
Toluene	108-88-3	0.019	0.002
Chlorobenzene	108-90-7	ND	0.003
Ethylbenzene	100-41-4	ND	0.003

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry  
(continued)

Client Reference: 33508.00

Sample Identification: BH-13-A

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
1,3-Dichlorobenzene	541-73-7	ND	0.003
1,2-Dichlorobenzene	95-50-1	ND	0.003
1,4-Dichlorobenzene	106-46-7	ND	0.003
Freon 113	76-13-1	ND	0.003
Total Xylenes	1330-20-7	ND	0.003
Acetone	67-64-1	ND	0.03
2-Butanone	78-93-3	ND	0.02
4-Methyl-2-pentanone	108-10-1	ND	0.02
2-Hexanone	591-78-6	ND	0.02
Vinyl acetate	108-05-4	ND	0.01
Carbon disulfide	75-15-0	ND	0.003
Styrene	100-42-5	ND	0.003
Acrolein	107-02-8	ND	0.01
Acrylonitrile	107-13-1	ND	0.01

ND Not detected at or above limit of detection  
-- Information not available or not applicable



Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.47

Sample Identification:	BH-13-B	Date Sampled:	02/01/91
Lab Number:	9102047-13A	Date Received:	02/06/91
Sample Matrix/Media:	SOIL	Date Prepared:	02/12/91
Analytical Method:	EPA 8240 (Low Level)	Date Analyzed:	02/12/91
Preparation Method:	EPA 5030		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Purgeable Organics</u>			
Chloromethane	74-87-3	ND	0.01
Bromomethane	74-83-9	ND	0.004
Vinyl chloride	75-01-4	ND	0.004
Chloroethane	75-00-3	ND	0.004
Methylene chloride	75-09-2	ND	0.01
Trichlorofluoromethane	75-69-4	ND	0.003
1,1-Dichloroethene	75-35-4	ND	0.003
1,1-Dichloroethane	75-35-3	ND	0.003
Trans-1,2-Dichloroethene	156-60-5	ND	0.003
Cis-1,2-Dichloroethene	156-59-2	0.009	0.003
1,2-Dichloroethene (total)	540-59-0	0.009	0.003
Chloroform	67-66-3	ND	0.003
1,2-Dichloroethane	107-06-2	ND	0.003
1,1,1-Trichloroethane	71-55-6	ND	0.003
Carbon tetrachloride	56-23-5	ND	0.003
Bromodichloromethane	75-27-4	ND	0.003
1,2-Dichloropropane	78-87-5	ND	0.003
Cis-1,3-Dichloropropene	10061-01-5	ND	0.003
Trichloroethene	79-01-6	ND	0.004
Benzene	71-43-2	ND	0.002
Dibromochloromethane	124-48-1	ND	0.002
1,1,2-Trichloroethane	79-00-5	ND	0.003
Trans-1,3-Dichloropropene	10061-02-6	ND	0.005
2-Chloroethylvinylether	100-75-8	ND	0.003
Bromoform	75-25-2	ND	0.003
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.004
Tetrachloroethene	127-18-4	0.008	0.004
Toluene	108-88-3	ND	0.002
Chlorobenzene	108-90-7	ND	0.003
Ethylbenzene	100-41-4	ND	0.003

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry  
(continued)

Client Reference: 33508.00

Sample Identification: BH-13-B

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
1,3-Dichlorobenzene	541-73-7	ND	0.003
1,2-Dichlorobenzene	95-50-1	ND	0.003
1,4-Dichlorobenzene	106-46-7	ND	0.003
Freon 113	76-13-1	ND	0.003
Total Xylenes	1330-20-7	ND	0.003
Acetone	67-64-1	0.03	0.03
2-Butanone	78-93-3	ND	0.02
4-Methyl-2-pentanone	108-10-1	ND	0.02
2-Hexanone	591-78-6	ND	0.02
Vinyl acetate	108-05-4	ND	0.01
Carbon disulfide	75-15-0	ND	0.003
Styrene	100-42-5	ND	0.003
Acrolein	107-02-8	ND	0.01
Acrylonitrile	107-13-1	ND	0.01

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.47

Sample Identification:	BH-13-C	Date Sampled:	02/01/91
Lab Number:	9102047-14A	Date Received:	02/06/91
Sample Matrix/Media:	SOIL	Date Prepared:	02/12/91
Analytical Method:	EPA 8240 (Low Level)	Date Analyzed:	02/12/91
Preparation Method:	EPA 5030		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Purgeable Organics</u>			
Chloromethane	74-87-3	ND	0.01
Bromomethane	74-83-9	ND	0.004
Vinyl chloride	75-01-4	ND	0.004
Chloroethane	75-00-3	ND	0.004
Methylene chloride	75-09-2	ND	0.01
Trichlorofluoromethane	75-69-4	ND	0.003
1,1-Dichloroethene	75-35-4	ND	0.003
1,1-Dichloroethane	75-35-3	ND	0.003
Trans-1,2-Dichloroethene	156-60-5	ND	0.003
Cis-1,2-Dichloroethene	156-59-2	ND	0.003
1,2-Dichloroethene (total)	540-59-0	ND	0.003
Chloroform	67-66-3	ND	0.003
1,2-Dichloroethane	107-06-2	ND	0.003
1,1,1-Trichloroethane	71-55-6	ND	0.003
Carbon tetrachloride	56-23-5	ND	0.003
Bromodichloromethane	75-27-4	ND	0.003
1,2-Dichloropropane	78-87-5	ND	0.003
Cis-1,3-Dichloropropene	10061-01-5	ND	0.003
Trichloroethene	79-01-6	ND	0.004
Benzene	71-43-2	ND	0.002
Dibromochloromethane	124-48-1	ND	0.002
1,1,2-Trichloroethane	79-00-5	ND	0.003
Trans-1,3-Dichloropropene	10061-02-6	ND	0.005
2-Chloroethylvinylether	100-75-8	ND	0.003
Bromoform	75-25-2	ND	0.003
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.004
Tetrachloroethene	127-18-4	ND	0.004
Toluene	108-88-3	ND	0.002
Chlorobenzene	108-90-7	ND	0.003
Ethylbenzene	100-41-4	ND	0.003

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry  
(continued)

Client Reference: 33508.00

Sample Identification: BH-13-C

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
1,3-Dichlorobenzene	541-73-7	ND	0.003
1,2-Dichlorobenzene	95-50-1	ND	0.003
1,4-Dichlorobenzene	106-46-7	ND	0.003
Freon 113	76-13-1	ND	0.003
Total Xylenes	1330-20-7	ND	0.003
Acetone	67-64-1	ND	0.03
2-Butanone	78-93-3	ND	0.02
4-Methyl-2-pentanone	108-10-1	ND	0.02
2-Hexanone	591-78-6	ND	0.02
Vinyl acetate	108-05-4	ND	0.01
Carbon disulfide	75-15-0	ND	0.003
Styrene	100-42-5	ND	0.003
Acrolein	107-02-8	ND	0.01
Acrylonitrile	107-13-1	ND	0.01

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.47

Sample Identification:	BH-13-D	Date Sampled:	02/01/91
Lab Number:	9102047-15A	Date Received:	02/06/91
Sample Matrix/Media:	SOIL	Date Prepared:	02/12/91
Analytical Method:	EPA 8240 (Low Level)	Date Analyzed:	02/12/91
Preparation Method:	EPA 5030		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Purgeable Organics</u>			
Chloromethane	74-87-3	ND	0.01
Bromomethane	74-83-9	ND	0.004
Vinyl chloride	75-01-4	ND	0.004
Chloroethane	75-00-3	ND	0.004
Methylene chloride	75-09-2	ND	0.01
Trichlorofluoromethane	75-69-4	ND	0.003
1,1-Dichloroethene	75-35-4	ND	0.003
1,1-Dichloroethane	75-35-3	ND	0.003
Trans-1,2-Dichloroethene	156-60-5	ND	0.003
Cis-1,2-Dichloroethene	156-59-2	ND	0.003
1,2-Dichloroethene (total)	540-59-0	ND	0.003
Chloroform	67-66-3	ND	0.003
1,2-Dichloroethane	107-06-2	ND	0.003
1,1,1-Trichloroethane	71-55-6	ND	0.003
Carbon tetrachloride	56-23-5	ND	0.003
Bromodichloromethane	75-27-4	ND	0.003
1,2-Dichloropropane	78-87-5	ND	0.003
Cis-1,3-Dichloropropene	10061-01-5	ND	0.003
Trichloroethene	79-01-6	ND	0.004
Benzene	71-43-2	ND	0.002
Dibromochloromethane	124-48-1	ND	0.002
1,1,2-Trichloroethane	79-00-5	ND	0.003
Trans-1,3-Dichloropropene	10061-02-6	ND	0.005
2-Chloroethylvinylether	100-75-8	ND	0.003
Bromoform	75-25-2	ND	0.003
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.004
Tetrachloroethene	127-18-4	ND	0.004
Toluene	108-88-3	0.008	0.002
Chlorobenzene	108-90-7	ND	0.003
Ethylbenzene	100-41-4	ND	0.003

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry  
(continued)

Client Reference: 33508.00

Sample Identification: BH-13-D

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
1,3-Dichlorobenzene	541-73-7	ND	0.003
1,2-Dichlorobenzene	95-50-1	ND	0.003
1,4-Dichlorobenzene	106-46-7	ND	0.003
Freon 113	76-13-1	ND	0.003
Total Xylenes	1330-20-7	ND	0.003
Acetone	67-64-1	ND	0.03
2-Butanone	78-93-3	ND	0.02
4-Methyl-2-pentanone	108-10-1	ND	0.02
2-Hexanone	591-78-6	ND	0.02
Vinyl acetate	108-05-4	ND	0.01
Carbon disulfide	75-15-0	ND	0.003
Styrene	100-42-5	ND	0.003
Acrolein	107-02-8	ND	0.01
Acrylonitrile	107-13-1	ND	0.01

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.47

Sample Identification:	BH-13-E	Date Sampled:	02/01/91
Lab Number:	9102047-16A	Date Received:	02/06/91
Sample Matrix/Media:	SOIL	Date Prepared:	02/12/91
Analytical Method:	EPA 8240 (Low Level)	Date Analyzed:	02/12/91
Preparation Method:	EPA 5030		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Purgeable Organics</u>			
Chloromethane	74-87-3	ND	0.01
Bromomethane	74-83-9	ND	0.004
Vinyl chloride	75-01-4	ND	0.004
Chloroethane	75-00-3	ND	0.004
Methylene chloride	75-09-2	ND	0.01
Trichlorofluoromethane	75-69-4	ND	0.003
1,1-Dichloroethene	75-35-4	ND	0.003
1,1-Dichloroethane	75-35-3	ND	0.003
Trans-1,2-Dichloroethene	156-60-5	ND	0.003
Cis-1,2-Dichloroethene	156-59-2	ND	0.003
1,2-Dichloroethene (total)	540-59-0	ND	0.003
Chloroform	67-66-3	ND	0.003
1,2-Dichloroethane	107-06-2	ND	0.003
1,1,1-Trichloroethane	71-55-6	ND	0.003
Carbon tetrachloride	56-23-5	ND	0.003
Bromodichloromethane	75-27-4	ND	0.003
1,2-Dichloropropane	78-87-5	ND	0.003
Cis-1,3-Dichloropropene	10061-01-5	ND	0.003
Trichloroethene	79-01-6	ND	0.004
Benzene	71-43-2	ND	0.002
Dibromochloromethane	124-48-1	ND	0.002
1,1,2-Trichloroethane	79-00-5	ND	0.003
Trans-1,3-Dichloropropene	10061-02-6	ND	0.005
2-Chloroethylvinylether	100-75-8	ND	0.003
Bromoform	75-25-2	ND	0.003
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.004
Tetrachloroethene	127-18-4	ND	0.004
Toluene	108-88-3	ND	0.002
Chlorobenzene	108-90-7	ND	0.003
Ethylbenzene	100-41-4	ND	0.003

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry  
(continued)

Client Reference: 33508.00

Sample Identification: BH-13-E

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
1,3-Dichlorobenzene	541-73-7	ND	0.003
1,2-Dichlorobenzene	95-50-1	ND	0.003
1,4-Dichlorobenzene	106-46-7	ND	0.003
Freon 113	76-13-1	ND	0.003
Total Xylenes	1330-20-7	ND	0.003
Acetone	67-64-1	ND	0.03
2-Butanone	78-93-3	ND	0.02
4-Methyl-2-pentanone	108-10-1	ND	0.02
2-Hexanone	591-78-6	ND	0.02
Vinyl acetate	108-05-4	ND	0.01
Carbon disulfide	75-15-0	ND	0.003
Styrene	100-42-5	ND	0.003
Acrolein	107-02-8	ND	0.01
Acrylonitrile	107-13-1	ND	0.01

ND Not detected at or above limit of detection  
-- Information not available or not applicable



Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.47

Sample Identification:	BH-13-F	Date Sampled:	02/01/91
Lab Number:	9102047-17A	Date Received:	02/06/91
Sample Matrix/Media:	SOIL	Date Prepared:	02/12/91
Analytical Method:	EPA 8240 (Low Level)	Date Analyzed:	02/13/91
Preparation Method:	EPA 5030		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Purgeable Organics</u>			
Chloromethane	74-87-3	ND	0.01
Bromomethane	74-83-9	ND	0.004
Vinyl chloride	75-01-4	ND	0.004
Chloroethane	75-00-3	ND	0.004
Methylene chloride	75-09-2	ND	0.01
Trichlorofluoromethane	75-69-4	ND	0.003
1,1-Dichloroethene	75-35-4	ND	0.003
1,1-Dichloroethane	75-35-3	ND	0.003
Trans-1,2-Dichloroethene	156-60-5	ND	0.003
Cis-1,2-Dichloroethene	156-59-2	ND	0.003
1,2-Dichloroethene (total)	540-59-0	ND	0.003
Chloroform	67-66-3	ND	0.003
1,2-Dichloroethane	107-06-2	ND	0.003
1,1,1-Trichloroethane	71-55-6	ND	0.003
Carbon tetrachloride	56-23-5	ND	0.003
Bromodichloromethane	75-27-4	ND	0.003
1,2-Dichloropropane	78-87-5	ND	0.003
Cis-1,3-Dichloropropene	10061-01-5	ND	0.003
Trichloroethene	79-01-6	ND	0.004
Benzene	71-43-2	ND	0.002
Dibromochloromethane	124-48-1	ND	0.002
1,1,2-Trichloroethane	79-00-5	ND	0.003
Trans-1,3-Dichloropropene	10061-02-6	ND	0.005
2-Chloroethylvinylether	100-75-8	ND	0.003
Bromoform	75-25-2	ND	0.003
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.004
Tetrachloroethene	127-18-4	ND	0.004
Toluene	108-88-3	ND	0.002
Chlorobenzene	108-90-7	ND	0.003
Ethylbenzene	100-41-4	ND	0.003

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry  
(continued)

Client Reference: 33508.00

Sample Identification: BH-13-F

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
1,3-Dichlorobenzene	541-73-7	ND	0.003
1,2-Dichlorobenzene	95-50-1	ND	0.003
1,4-Dichlorobenzene	106-46-7	ND	0.003
Freon 113	76-13-1	ND	0.003
Total Xylenes	1330-20-7	ND	0.003
Acetone	67-64-1	ND	0.03
2-Butanone	78-93-3	ND	0.02
4-Methyl-2-pentanone	108-10-1	ND	0.02
2-Hexanone	591-78-6	ND	0.02
Vinyl acetate	108-05-4	ND	0.01
Carbon disulfide	75-15-0	ND	0.003
Styrene	100-42-5	ND	0.003
Acrolein	107-02-8	ND	0.01
Acrylonitrile	107-13-1	ND	0.01

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.47

Sample Identification:	BH-10-G	Date Sampled:	02/01/91
Lab Number:	9102047-18A	Date Received:	02/06/91
Sample Matrix/Media:	SOIL	Date Prepared:	02/13/91
Analytical Method:	EPA 8240 (Low Level)	Date Analyzed:	02/13/91
Preparation Method:	EPA 5030		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Purgeable Organics</u>			
Chloromethane	74-87-3	ND	0.01
Bromomethane	74-83-9	ND	0.004
Vinyl chloride	75-01-4	ND	0.004
Chloroethane	75-00-3	ND	0.004
Methylene chloride	75-09-2	ND	0.01
Trichlorofluoromethane	75-69-4	ND	0.003
1,1-Dichloroethene	75-35-4	ND	0.003
1,1-Dichloroethane	75-35-3	ND	0.003
Trans-1,2-Dichloroethene	156-60-5	ND	0.003
Cis-1,2-Dichloroethene	156-59-2	ND	0.003
1,2-Dichloroethene (total)	540-59-0	ND	0.003
Chloroform	67-66-3	ND	0.003
1,2-Dichloroethane	107-06-2	ND	0.003
1,1,1-Trichloroethane	71-55-6	ND	0.003
Carbon tetrachloride	56-23-5	ND	0.003
Bromodichloromethane	75-27-4	ND	0.003
1,2-Dichloropropane	78-87-5	ND	0.003
Cis-1,3-Dichloropropene	10061-01-5	ND	0.003
Trichloroethene	79-01-6	ND	0.004
Benzene	71-43-2	ND	0.002
Dibromochloromethane	124-48-1	ND	0.002
1,1,2-Trichloroethane	79-00-5	ND	0.003
Trans-1,3-Dichloropropene	10061-02-6	ND	0.005
2-Chloroethylvinylether	100-75-8	ND	0.003
Bromoform	75-25-2	ND	0.003
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.004
Tetrachloroethene	127-18-4	ND	0.004
Toluene	108-88-3	ND	0.002
Chlorobenzene	108-90-7	ND	0.003
Ethylbenzene	100-41-4	ND	0.003

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry  
(continued)

Client Reference: 33508.00

Sample Identification: BH-10-G

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
1,3-Dichlorobenzene	541-73-7	ND	0.003
1,2-Dichlorobenzene	95-50-1	ND	0.003
1,4-Dichlorobenzene	106-46-7	ND	0.003
Freon 113	76-13-1	ND	0.003
Total Xylenes	1330-20-7	ND	0.003
Acetone	67-64-1	ND	0.03
2-Butanone	78-93-3	ND	0.02
4-Methyl-2-pentanone	108-10-1	ND	0.02
2-Hexanone	591-78-6	ND	0.02
Vinyl acetate	108-05-4	ND	0.01
Carbon disulfide	75-15-0	ND	0.003
Styrene	100-42-5	ND	0.003
Acrolein	107-02-8	ND	0.01
Acrylonitrile	107-13-1	ND	0.01

ND Not detected at or above limit of detection

-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.47

Sample Identification:	BH-12-G	Date Sampled:	02/01/91
Lab Number:	9102047-19A	Date Received:	02/06/91
Sample Matrix/Media:	SOIL	Date Prepared:	02/13/91
Analytical Method:	EPA 8240 (Low Level)	Date Analyzed:	02/13/91
Preparation Method:	EPA 5030		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Purgeable Organics</u>			
Chloromethane	74-87-3	ND	0.01
Bromomethane	74-83-9	ND	0.004
Vinyl chloride	75-01-4	ND	0.004
Chloroethane	75-00-3	ND	0.004
Methylene chloride	75-09-2	ND	0.01
Trichlorofluoromethane	75-69-4	ND	0.003
1,1-Dichloroethene	75-35-4	ND	0.003
1,1-Dichloroethane	75-35-3	ND	0.003
Trans-1,2-Dichloroethene	156-60-5	ND	0.003
Cis-1,2-Dichloroethene	156-59-2	ND	0.003
1,2-Dichloroethene (total)	540-59-0	ND	0.003
Chloroform	67-66-3	ND	0.003
1,2-Dichloroethane	107-06-2	ND	0.003
1,1,1-Trichloroethane	71-55-6	ND	0.003
Carbon tetrachloride	56-23-5	ND	0.003
Bromodichloromethane	75-27-4	ND	0.003
1,2-Dichloropropane	78-87-5	ND	0.003
Cis-1,3-Dichloropropene	10061-01-5	ND	0.003
Trichloroethene	79-01-6	ND	0.004
Benzene	71-43-2	ND	0.002
Dibromochloromethane	124-48-1	ND	0.002
1,1,2-Trichloroethane	79-00-5	ND	0.003
Trans-1,3-Dichloropropene	10061-02-6	ND	0.005
2-Chloroethylvinylether	100-75-8	ND	0.003
Bromoform	75-25-2	ND	0.003
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.004
Tetrachloroethene	127-18-4	0.008	0.004
Toluene	108-88-3	0.008	0.002
Chlorobenzene	108-90-7	ND	0.003
Ethylbenzene	100-41-4	ND	0.003

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry  
(continued)

Client Reference: 33508.00

Sample Identification: BH-12-G

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
1,3-Dichlorobenzene	541-73-7	ND	0.003
1,2-Dichlorobenzene	95-50-1	ND	0.003
1,4-Dichlorobenzene	106-46-7	ND	0.003
Freon 113	76-13-1	ND	0.003
Total Xylenes	1330-20-7	ND	0.003
Acetone	67-64-1	ND	0.03
2-Butanone	78-93-3	ND	0.02
4-Methyl-2-pentanone	108-10-1	ND	0.02
2-Hexanone	591-78-6	ND	0.02
Vinyl acetate	108-05-4	ND	0.01
Carbon disulfide	75-15-0	ND	0.003
Styrene	100-42-5	ND	0.003
Acrolein	107-02-8	ND	0.01
Acrylonitrile	107-13-1	ND	0.01

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.47

Sample Identification:	BH-13-G	Date Sampled:	02/01/91
Lab Number:	9102047-20A	Date Received:	02/06/91
Sample Matrix/Media:	SOIL	Date Prepared:	02/13/91
Analytical Method:	EPA 8240 (Low Level)	Date Analyzed:	02/13/91
Preparation Method:	EPA 5030		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Purgeable Organics</u>			
Chloromethane	74-87-3	ND	0.01
Bromomethane	74-83-9	ND	0.004
Vinyl chloride	75-01-4	ND	0.004
Chloroethane	75-00-3	ND	0.004
Methylene chloride	75-09-2	ND	0.01
Trichlorofluoromethane	75-69-4	ND	0.003
1,1-Dichloroethene	75-35-4	ND	0.003
1,1-Dichloroethane	75-35-3	ND	0.003
Trans-1,2-Dichloroethene	156-60-5	ND	0.003
Cis-1,2-Dichloroethene	156-59-2	0.009	0.003
1,2-Dichloroethene (total)	540-59-0	0.009	0.003
Chloroform	67-66-3	ND	0.003
1,2-Dichloroethane	107-06-2	ND	0.003
1,1,1-Trichloroethane	71-55-6	ND	0.003
Carbon tetrachloride	56-23-5	ND	0.003
Bromodichloromethane	75-27-4	ND	0.003
1,2-Dichloropropane	78-87-5	ND	0.003
Cis-1,3-Dichloropropene	10061-01-5	ND	0.003
Trichloroethene	79-01-6	ND	0.004
Benzene	71-43-2	ND	0.002
Dibromochloromethane	124-48-1	ND	0.002
1,1,2-Trichloroethane	79-00-5	ND	0.003
Trans-1,3-Dichloropropene	10061-02-6	ND	0.005
2-Chloroethylvinylether	100-75-8	ND	0.003
Bromoform	75-25-2	ND	0.003
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.004
Tetrachloroethene	127-18-4	0.017	0.004
Toluene	108-88-3	0.010	0.002
Chlorobenzene	108-90-7	ND	0.003
Ethylbenzene	100-41-4	ND	0.003

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry  
(continued)

Client Reference: 33508.00

Sample Identification: BH-13-G

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
1,3-Dichlorobenzene	541-73-7	ND	0.003
1,2-Dichlorobenzene	95-50-1	ND	0.003
1,4-Dichlorobenzene	106-46-7	ND	0.003
Freon 113	76-13-1	ND	0.003
Total Xylenes	1330-20-7	ND	0.003
Acetone	67-64-1	ND	0.03
2-Butanone	78-93-3	ND	0.02
4-Methyl-2-pentanone	108-10-1	ND	0.02
2-Hexanone	591-78-6	ND	0.02
Vinyl acetate	108-05-4	ND	0.01
Carbon disulfide	75-15-0	ND	0.003
Styrene	100-42-5	ND	0.003
Acrolein	107-02-8	ND	0.01
Acrylonitrile	107-13-1	ND	0.01

ND Not detected at or above limit of detection  
-- Information not available or not applicable



Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.47

Sample Identification:	METHOD BLANK	Date Sampled:	--
Lab Number:	9102047-21A	Date Received:	--
Sample Matrix/Media:	SOIL	Date Prepared:	02/12/91
Analytical Method:	EPA 8240 (Low Level)	Date Analyzed:	02/12/91
Preparation Method:	EPA 5030		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Purgeable Organics</u>			
Chloromethane	74-87-3	ND	0.01
Bromomethane	74-83-9	ND	0.004
Vinyl chloride	75-01-4	ND	0.004
Chloroethane	75-00-3	ND	0.004
Methylene chloride	75-09-2	ND	0.01
Trichlorofluoromethane	75-69-4	ND	0.003
1,1-Dichloroethene	75-35-4	ND	0.003
1,1-Dichloroethane	75-35-3	ND	0.003
Trans-1,2-Dichloroethene	156-60-5	ND	0.003
Cis-1,2-Dichloroethene	156-59-2	ND	0.003
1,2-Dichloroethene (total)	540-59-0	ND	0.003
Chloroform	67-66-3	ND	0.003
1,2-Dichloroethane	107-06-2	ND	0.003
1,1,1-Trichloroethane	71-55-6	ND	0.003
Carbon tetrachloride	56-23-5	ND	0.003
Bromodichloromethane	75-27-4	ND	0.003
1,2-Dichloropropane	78-87-5	ND	0.003
Cis-1,3-Dichloropropene	10061-01-5	ND	0.003
Trichloroethene	79-01-6	ND	0.004
Benzene	71-43-2	ND	0.002
Dibromochloromethane	124-48-1	ND	0.002
1,1,2-Trichloroethane	79-00-5	ND	0.003
Trans-1,3-Dichloropropene	10061-02-6	ND	0.005
2-Chloroethylvinylether	100-75-8	ND	0.003
Bromoform	75-25-2	ND	0.003
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.004
Tetrachloroethene	127-18-4	ND	0.004
Toluene	108-88-3	ND	0.002
Chlorobenzene	108-90-7	ND	0.003
Ethylbenzene	100-41-4	ND	0.003

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry  
(continued)

Client Reference: 33508.00

Sample Identification: METHOD BLANK

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
1,3-Dichlorobenzene	541-73-7	ND	0.003
1,2-Dichlorobenzene	95-50-1	ND	0.003
1,4-Dichlorobenzene	106-46-7	ND	0.003
Freon 113	76-13-1	ND	0.003
Total Xylenes	1330-20-7	ND	0.003
Acetone	67-64-1	ND	0.03
2-Butanone	78-93-3	ND	0.02
4-Methyl-2-pentanone	108-10-1	ND	0.02
2-Hexanone	591-78-6	ND	0.02
Vinyl acetate	108-05-4	ND	0.01
Carbon disulfide	75-15-0	ND	0.003
Styrene	100-42-5	ND	0.003
Acrolein	107-02-8	ND	0.01
Acrylonitrile	107-13-1	ND	0.01

ND Not detected at or above limit of detection

-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.47

Sample Identification:	See below	Date Sampled:	02/01/91
Lab Number:	9102047	Date Received:	02/06/91
Sample Matrix/Media:	Soil	Date Extracted:	02/07/91
Extraction Method:	EPA 418.1 (Modified)	Date Analyzed:	02/08/91
Analytical Method:	EPA 418.1 (Modified)		

Laboratory No.	Sample Identification	Total Recoverable Petroleum Hydrocarbons (mg/kg)
-01	BH-10-B	16,000
-02	BH-10-C	21,000
-03	BH-10-D	14,000
-04	BH-10-E	230
-05	BH-10-F	<10
-06	BH-12-A	<10
-07	BH-12-B	<10
-08	BH-12-C	<10
-09	BH-12-D	20
-10	BH-12-E	10
-11	BH-12-F	<10

Limit of Detection:	10
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ND = Not detected at or above limit of detection

Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.47

Sample Identification:	See below	Date Sampled:	02/01/91
Lab Number:	9102047	Date Received:	02/06/91
Sample Matrix/Media:	Soil	Date Extracted:	02/07/91
Extraction Method:	EPA 418.1 (Modified)	Date Analyzed:	02/08/91
Analytical Method:	EPA 418.1 (Modified)		

Laboratory No.	Sample Identification	Total Recoverable Petroleum Hydrocarbons (mg/kg)
-12	BH-13-A	<10
-13	BH-13-B	<10
-14	BH-13-C	<10
-15	BH-13-D	<10
-16	BH-13-E	<10
-17	BH-13-F	<10
-18	BH-10-G	<10
-19	BH-12-G	<10
-20	BH-13-G	10
-MB	METHOD BLANK	<10

Limit of Detection:	10
---------------------	----

ND = Not detected at or above limit of detection

# Clayton

## ENVIRONMENTAL CONSULTANTS

A Marsh & McLennan Company

### REQUEST FOR LABORATORY ANALYTICAL SERVICES

STUDY CO

For Clayton Use Only Page 1 of 2

Project No. \_\_\_\_\_

Batch No. 9102047

Client No. \_\_\_\_\_

Date Logged In 2-6-91 By TS

REPORT RESULTS TO	Name <u>GUY ROMINE</u>	Title _____	Purchase Order No. _____		Client Job No. <u>33508.0</u>	
	Company <u>CYPRESS, CA</u>	Dept. <u>EE</u>	Name _____		Company _____	
	Mailing Address _____	City, State, Zip _____	Address _____		City, State, Zip _____	
	Telephone No. _____	Telefax No. _____	City, State, Zip _____		City, State, Zip _____	
Date Results Required: <u>14-DAYS</u>		Rush Charges Authorized? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Phone Results <input type="checkbox"/>	Samples are: (check if applicable)		
Special Instructions: (method, limit of detection, etc.) <u>FAX RESULTS</u>			<input type="checkbox"/> Drinking Water <input type="checkbox"/> Collected in the State of New York			ANALYSIS REQUESTED (Enter an 'X' in the box below to indicate request; Enter a 'P' if Preservative added. *)
* Explanation of Preservative: <u>NONE</u>						
CLIENT SAMPLE IDENTIFICATION		DATE SAMPLED	MATRIX/MEDIA	AIR VOLUME (specify units)	Number of Containers	FOR LAB USE ONLY
<u>BH-10-A</u>		<u>2-1-91</u>	<u>SOIL</u>		<u>1</u>	<u>8240</u> <u>418.1</u> <u>01 A</u> <u>02</u> <u>03</u> <u>04</u> <u>05</u> <u>06</u> <u>07</u> <u>08</u> <u>09</u>
<u>BH-10-B</u>						
<u>BH-10-C</u>						
<u>BH-10-D</u>						
<u>BH-10-E</u>						
<u>BH-10-F</u>						
<u>BH-12-A</u>						
<u>BH-12-B</u>						
<u>BH-12-C</u>						
<u>BH-12-D</u>		<u>2-1-91</u>	<u>SOIL</u>		<u>1</u>	
CHAIN OF CUSTODY	Relinquished by: <u>G. K. Romine</u>	Date/Time: <u>2/5/91 15:50</u>	Received by: _____			Date/Time: _____
	Relinquished by: _____	Date/Time: _____	Received at Lab by: <u>Terry Salvo</u>			Date/Time: <u>2-6-91 10:30am</u>
	Method of Shipment: _____		Sample Condition Upon Receipt: <input type="checkbox"/> Acceptable <input type="checkbox"/> Other (explain)			
Authorized by: <u>[Signature]</u>		Date: <u>2/5/91</u>	<u>*Didn't Rec'd BH-10-A</u> <u>and Rec'd BH-12-C &amp; BH-10-C &amp; BH-13-C</u>			

Please return completed form and samples to one of the Clayton Environmental Consultants, Inc. labs listed below:

22345 Roethel Drive  
Novi, MI 48050  
(313) 344-1770

Raritan Center  
160 Fieldcrest Ave.  
Edison, NJ 08837  
(201) 225-6040

400 Chastain Center Blvd., N.W.  
Suite 490  
Kennesaw, GA 30144  
(404) 499-7500

1252 Quarry Lane  
Pleasanton, CA 94566  
(415) 426-2600

DISTRIBUTION:  
WHITE - Clayton Laboratory  
YELLOW - Clayton Accounting  
PINK - Client Copy

# Clayton

## ENVIRONMENTAL CONSULTANTS

A Marsh & McLennan Company

### REQUEST FOR LABORATORY ANALYTICAL SERVICES

STODDY CO

For Clayton Use Only Page 2 of 2

Project No. \_\_\_\_\_

Batch No. 9102047

Client No. \_\_\_\_\_

Date Logged In 2-6-91 By TS

REPORT RESULTS TO	Name <u>GUY ROMINE</u>		Title _____		Purchase Order No. _____		Client Job No. <u>33508.0</u>		
	Company _____		Dept. <u>EE</u>		Name _____		Dept. _____		
	Mailing Address _____		City, State, Zip _____		Address _____		City, State, Zip _____		
	Telephone No. _____		Telefax No. _____		SEND INVOICE TO _____		City, State, Zip _____		
Date Results Required: <u>14-DAY</u>		Rush Charges Authorized? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Phone Results <input type="checkbox"/>		Samples are: (check if applicable) <input type="checkbox"/> Drinking Water <input type="checkbox"/> Collected in the State of New York		ANALYSIS REQUESTED (Enter an 'X' in the box below to indicate request; Enter a 'P' if Preservative added.)	
Special Instructions: (method, limit of detection, etc.) <u>FAX RESULTS</u>				Explanation of Preservative: <u>NONE</u>					
CLIENT SAMPLE IDENTIFICATION				DATE SAMPLED	MATRIX/MEDIA	AIR VOLUME (specify units)	Number of Containers	FOR LAB USE ONLY	
<u>BH-12-E</u>				<u>2-1-91</u>	<u>SOIL</u>		<u>1</u>	<u>10A</u>	
<u>BH-12-F</u>								<u>11</u>	
<u>BH-13-A</u>								<u>12</u>	
<u>BH-13-B</u>								<u>13</u>	
<u>BH-13-C</u>								<u>14</u>	
<u>BH-13-D</u>								<u>15</u>	
<u>BH-13-E</u>								<u>16</u>	
<u>BH-13-F</u>				<u>2-1-91</u>	<u>SOIL</u>		<u>1</u>	<u>17</u>	
<u>BH-10-G</u>								<u>18</u>	
<u>BH-12-G BH13-G</u>								<u>19</u>	
								<u>20A</u>	
CHAIN OF CUSTODY	Relinquished by: <u>G.K. Romine</u>		Date/Time: <u>2/5/91 15:50</u>		Received by: _____		Date/Time: _____		
	Relinquished by: _____		Date/Time: _____		Received at Lab by: <u>Trey Salvo</u>		Date/Time: <u>2-6-91 10:30 AM</u>		
	Method of Shipment: _____				Sample Condition Upon Receipt: <input type="checkbox"/> Acceptable <input type="checkbox"/> Other (explain)				
Authorized by: <u>G.K. Romine</u>				Date: <u>2/5/91</u>					
(Client Signature <u>Must</u> Accompany Request)									

Please return completed form and samples to one of the Clayton Environmental Consultants, Inc. labs listed below:

22345 Roethel Drive  
Novi, MI 48050  
(313) 344-1770

Raritan Center  
160 Fieldcrest Ave.  
Edison, NJ 08837  
(201) 225-6040

400 Chastain Center Blvd., N.W.  
Suite 490  
Kennesaw, GA 30144  
(404) 499-7500

1252 Quarry Lane  
Pleasanton, CA 94566  
(415) 426-2600

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1252 Quarry Lane  
P.O. Box 9019  
Pleasanton, CA 94566  
(415) 426-2600  
Fax (415) 426-0106

**Clayton**  
ENVIRONMENTAL  
CONSULTANTS

February 21, 1991

Mr. Guy Romine  
CLAYTON ENVIRONMENTAL CONSULTANTS, INC.  
5785 Corporate Ave.  
Suite 150  
Cypress, CA 90630

ADDITIONAL REPORT  
Client Ref. 33508.00  
Clayton Project No. 91020.06

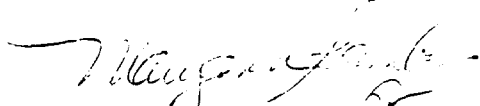
Dear Mr. Romine:

Attached is our analytical laboratory report for the samples received on February 1, 1991 and originally reported to you on February 11, 1991. On February 14, 1991 Robert Zicker requested TTLC and STLC copper, nickel and hexavalent chromium of samples MW-5-E (20) and BH-11-A (1). Those results are presented in this report. A copy of the Chain-of-Custody form acknowledging receipt of these samples is attached.

Please note that any unused portion of the samples will be disposed of 30 days after the date of this report, unless you have requested otherwise.

We appreciate the opportunity to be of assistance to you. If you have questions, please contact Maryann Gambino, Client Services Supervisor, at (415) 426-2657.

Sincerely,



Ronald H. Peters, CIH  
Director, Laboratory Services  
Western Operations

RHP/tb  
Attachments

Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.06

Sample Identification:	See below	Date Sampled:	01/31/91
Lab Number:	9102006	Date Received:	02/01/91
Sample Matrix/Media:	Soil	Date Prepared:	02/15/91
Preparation Method:	22CAC66700	Date Analyzed:	02/19/91
Analytical Method:	EPA 7196		

Laboratory No.	Sample Identification	STLC-Hexavalent Chromium (mg/L)
-05	MW-5-E (20)	<0.01
-08	BH-11-A (1)	<0.01
-MB	Method Blank	<0.01
Limit of Detection:		0.01

< Less than the indicated limit of detection (LOD)



Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.06

Sample Identification:	See below	Date Sampled:	01/31/91
Lab Number:	9102006	Date Received:	02/01/91
Sample Matrix/Media:	Soil	Date Analyzed:	02/14/91
Analytical Method:	EPA 7196		

Laboratory No.	Sample Identification	TTLC-Hexavalent Chromium (mg/kg)
-05	MW-5-E (20)	<0.1
-08	BH-11-A (1)	0.4
-MB	Method Blank	<0.1
Limit of Detection:		0.1

< Less than the indicated limit of detection (LOD)

Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.06

Sample Identification:	See below	Date Sampled:	01/31/91
Lab Number:	9102006	Date Received:	02/01/91
Sample Matrix/Media:	Soil	Date Extracted:	02/15/91
Extraction Method:	22CAC66700	Date Analyzed:	02/21/91
Analytical Method:	EPA 6010		

Laboratory No.	Sample Identification	STLC-Copper (mg/L)	STLC-Nickel (mg/L)
-05	MW-5-E (20)	0.3	<0.1
-08	BH-11-A (1)	0.2	0.6
-MB	Method Blank	<0.1	<0.1
Limit of Detection:		0.1	0.1

< Less than the indicated limit of detection (LOD)

Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.06

Sample Identification:	See below	Date Sampled:	01/31/91
Lab Number:	9102006	Date Received:	02/01/91
Sample Matrix/Media:	Soil	Date Analyzed:	02/19/91
Analytical Method:	EPA 6010		

Laboratory No.	Sample Identification	TTLC-Copper (mg/L)	TTLC-Nickel (mg/L)
-05	MW-5-E (20)	45	31
-08	BH-11-A (1)	24	17
-MB	Method Blank	<1	<1
Limit of Detection:		1	1

< Less than the indicated limit of detection (LOD)

Quality Assurance Results Summary  
for  
Clayton Project No. 91020.47

Clayton Lab Number: 9102047-03A  
Ext./Prep. Method: EPA7196  
Date: 02/21/91  
Analyst: SUE  
Std. Source: HACH23A0

Analytical Method: EPA7196  
Date: 02/21/91  
Analyst: SUE  
Sample Matrix/Media: DI EXTRACT  
Units: MG/L

Analyte	Sample Result	Spike Level	Matrix Spike Result	MS Recovery (%)	Matrix Spike Duplicate Result	MSD Recovery (%)	Average Recovery (% R)	LCL (% R)	UCL (% R)	RPD (%)	UCL (%RPD)
CHROMIUM VI	ND	0.500	0.489	98	0.457	91	95	75	125	6.8	20

LCS = Laboratory Control Sample  
ND = Not detected at or above limit of detection

LCL = Lower Control Limit

UCL = Upper Control Limit  
SOR = Spike out of range due to high sample concentration

Quality Assurance Results Summary  
for  
Clayton Project No. 91020.47

Clayton Lab Number: 9102047-03A  
Ext./Prep. Method: EPA7196  
Date: 02/18/91  
Analyst: SUE  
Std. Source: HACH 23A0

Analytical Method: EPA7196  
Date: 02/18/91  
Analyst: SUE  
Sample Matrix/Media: SOIL  
Units: MG/KG

Analyte	Sample Result	Spike Level	Matrix Spike Result	MS Recovery (%)	Matrix Spike Duplicate Result	MSD Recovery (%)	Average Recovery (% R)	LCL (% R)	UCL (% R)	RPD (%)	UCL (%RFD)
CHROMIUM6	ND	5.00	3.75	75	3.67	77	76	75	125	3.1	20

LCS = Laboratory Control Sample  
ND = Not detected at or above limit of detection

LCL = Lower Control Limit

UCL = Upper Control Limit  
SOR = Spike out of range due to high sample concentration.

Quality Assurance Results Summary  
for  
Clayton Project No. 91020.47

Clayton Lab Number: 9102047-03A  
Ext./Prep. Method: EPA3010  
Date: 02/21/91  
Analyst: JSL  
Std. Source: VH60309

Analytical Method: EPA6010  
Date: 02/21/91  
Analyst: JSL  
Sample Matrix/Media: SLIC  
Units: MG/L

Analyte	Sample Result	Spike Level	Matrix Spike Result	MS Recovery (%)	Matrix Spike Duplicate Result	MSD Recovery (%)	Average Recovery (% R)	LCL (% R)	UCL (% R)	RPD (%)	UCL (%RPD)
COPPER	ND	10.0	9.91	99	9.43	94	97	75	125	5.0	20
NICKEL	0.300	10.0	10.5	102	9.99	97	99	75	125	5.0	20

LCS = Laboratory Control Sample  
ND = Not detected at or above limit of detection

LCL = Lower Control Limit

UCL = Upper Control Limit  
SOR = Spike out of range due to high sample concentration.

Quality Assurance Results Summary  
for  
Clayton Project No. 91020.47

Clayton Lab Number: 9102047-03A  
Ext./Prep. Method: EPA3050  
Date: 02/18/91  
Analyst: JSL  
Std. Source: VHGO309

Analytical Method: EFAC010  
Date: 02/20/91  
Analyst: JSL  
Sample Matrix/Media: SOIL  
Units: MG/KG

Analyte	Sample Result	Spike Level	Matrix Spike Result	MS Recovery (%)	Matrix Spike Duplicate Result	MSD Recovery (%)	Average Recovery (% R)	LCL (% R)	UCL (% R)	RPD (%)	UCL (%RPD)
COPPER	35.0	50.0	93.5	117	87.4	105	111	75	125	6.7	20
NICKEL	17.0	50.0	61.2	88	61.4	89	89	75	125	0.3	20

LCS = Laboratory Control Sample  
ND = Not detected at or above limit of detection

LCL = Lower Control Limit

UCL = Upper Control Limit  
SOR = Spike out of range due to high sample concentration

# Clayton

ENVIRONMENTAL  
CONSULTANTS

A Marsh & McLennan Company

## REQUEST FOR LABORATORY ANALYTICAL SERVICES

STOODY CO.

For Clayton Use Only Page 1 of 1

Project No. \_\_\_\_\_

Batch No. 9102006

Client No. \_\_\_\_\_

Date Logged In 2-1-91 By TS

REPORT RESULTS TO	Name <u>GUY ROMINE</u>	Title _____	Purchase Order No. _____		Client Job No. <u>33508.0</u>	
	Company <u>CYPRESS, CA</u>	Dept. <u>EE</u>	Name _____		Company <u>SAME</u> Dept. _____	
	Mailing Address _____		Address _____			
	City, State, Zip _____	Telephone No. _____	City, State, Zip _____			
Date Results Required: <u>14-DAYS</u>		Rush Charges Authorized? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Phone Results <input type="checkbox"/>	Samples are: (check if applicable)		
Special Instructions: (method, limit of detection, etc.) <u>FAK RESULTS</u>				<input type="checkbox"/> Drinking Water <input type="checkbox"/> Collected in the State of New York		
Explanation of Preservative: <u>NONE</u>		ANALYSIS REQUESTED (Enter an 'X' in the box below to indicate request; Enter a 'P' if Preservative added.)				
CLIENT SAMPLE IDENTIFICATION		DATE SAMPLED	MATRIX/MEDIA	AIR VOLUME (specify units)	FOR LAB USE ONLY	
<u>MW-5-A (1)</u>		<u>1-31-91</u>	<u>SOIL</u>	<u>B. Core</u>	<u>1</u>	<u>01A</u>
<u>MW-5-B (5)</u>						<u>02</u>
<u>MW-5-C (10)</u>						<u>03</u>
<u>MW-5-D (15)</u>						<u>04</u>
<u>MW-5-E (20)</u>						<u>05</u>
<u>MW-5-F (25)</u>						<u>06</u>
<u>MW-5-G (30)</u>						<u>07</u>
<u>BH-11-A (1)</u>						<u>08</u>
<u>BH-11-B (5)</u>						<u>09</u>
<u>BH-11-C (10)</u>		<u>1-31-91</u>	<u>SOIL</u>		<u>1</u>	<u>10</u>
CHAIN OF CUSTODY	Relinquished by: <u>G.K. ROMINE</u>	Date/Time: <u>1/31/91 15:15</u>	Received by: _____			Date/Time: _____
	Relinquished by: _____	Date/Time: _____	Received at Lab by: <u>Tony Salvo</u>			Date/Time: <u>2/1/91 10:30 AM</u>
	Method of Shipment: _____		Sample Condition Upon Receipt: <input checked="" type="checkbox"/> Acceptable <input type="checkbox"/> Other (explain)			
Authorized by: <u>G.K. ROMINE</u>		Date: <u>1/31/91</u>				
(Client Signature Must Accompany Request)						

Please return completed form and samples to one of the Clayton Environmental Consultants, Inc. labs listed below:

22345 Roethel Drive  
Novi, MI 48050  
(313) 344-1770

Raritan Center  
160 Fieldcrest Ave.  
Edison, NJ 08837  
(201) 225-6040

400 Chastain Center Blvd., N.W.  
Suite 490  
Kennesaw, GA 30144  
(404) 499-7500

1252 Quarry Lane  
Pleasanton, CA 94566  
(415) 426-2600

### DISTRIBUTION:

WHITE - Clayton Laboratory  
YELLOW - Clayton Accounting  
PINK - Client Copy



**ENVIRONMENTAL  
CONSULTANTS**

# REQUEST FOR LABORATORY ANALYTICAL SERVICES

For Clayton Use Only Page 1 of 2

Project No. \_\_\_\_\_

Batch No. 9602006

Client No. \_\_\_\_\_

Date logged in 2/1/91 By TS

**Please return completed form and samples to one of the Clayton Environmental Consultants, Inc. labs listed below:**

6/90

1152 Quarry Lane  
P.O. Box 9019  
Pleasanton, CA 94566  
(415) 426-2600  
Fax (415) 426-0106

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MAR 1 1991

**Clayton**  
ENVIRONMENTAL  
CONSULTANTS

February 25, 1991

Mr. Guy Romine  
CLAYTON ENVIRONMENTAL CONSULTANTS, INC.  
5785 Corporate Ave., Suite 150  
Cypress, CA 90630

FINAL REPORT

Client Ref. 33508.00

Clayton Project No. 91020.47

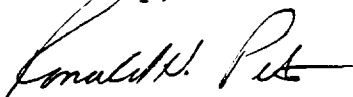
Dear Mr. Romine:

Attached is our analytical laboratory report for the samples received on February 6, 1991. Results for EPA 8240 and EPA 418.1 were reported to you on February 19, 1991. Metals results which were requested on February 18, 1991 are presented in this report. QA data for all analyses are also included in this report. A copy of the Chain-of-Custody form acknowledging receipt of these samples is attached.

Please note that any unused portion of the samples will be disposed of 30 days after the date of this report, unless you have requested otherwise.

We appreciate the opportunity to be of assistance to you. If you have any questions, please contact Maryann Gambino, Client Services Supervisor, at (415) 426-2657.

Sincerely,



Ronald H. Peters, CIH  
Director, Laboratory Services  
Western Operations

RHP/tb  
Attachments

Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.47

Sample Identification:	See below	Date Sampled:	02/01/91
Lab Number:	9102047	Date Received:	02/06/91
Sample Matrix/Media:	Soil	Date Extracted:	02/21/91
Extraction Method:	22CAC66700	Date Analyzed:	02/21/91
Analytical Method:	EPA 7196		

Laboratory No.	Sample Identification	STLC-Hexavalent Chromium (mg/L)
-03	BH-10-D	<0.01
-06	BH-12-A	<0.01
-12	BH-13-A	<0.01
-MB	METHOD BLANK	<0.01
Limit of Detection:		0.01

< Less than the indicated limit of detection (LOD)

Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.47

Sample Identification:	See below	Date Sampled:	02/01/91
Lab Number:	9102047	Date Received:	02/06/91
Sample Matrix/Media:	Soil	Date Analyzed:	02/18/91
Analytical Method:	EPA 7196		

Laboratory No.	Sample Identification	TTLc-Hexavalent Chromium (mg/kg)
-03	BH-10-D	<0.1
-06	BH-12-A	<0.1
-12	BH-13-A	0.1
-MB	METHOD BLANK	<0.1
Limit of Detection:		0.1

< Less than the indicated limit of detection (LOD)

Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.47

Sample Identification:	See below	Date Sampled:	02/01/91
Lab Number:	9102047	Date Received:	02/06/91
Sample Matrix/Media:	Soil	Date Extracted:	02/18/91
Extraction Method:	22CAC66700	Date Analyzed:	02/21/91
Analytical Method:	EPA 6010		

Laboratory No.	Sample Identification	STLC-Copper (mg/L)	STLC-Nickel (mg/L)
-03	BH-10-D	<0.1	0.3
-06	BH-12-A	0.3	0.6
-12	BH-13-A	0.4	0.7
-MB	METHOD BLANK	<0.1	<0.1
Limit of Detection:		0.1	0.1

< Less than the indicated limit of detection (LOD)

Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.47

Sample Identification:	See below	Date Sampled:	02/01/91
Lab Number:	9102047	Date Received:	02/06/91
Sample Matrix/Media:	Soil	Date Analyzed:	02/21/91
Analytical Method:	EPA 6010		

Laboratory No.	Sample Identification	TTL-Copper (mg/kg)	TTL-Nickel (mg/kg)
-03	BH-10-D	35	17
-06	BH-12-A	28	25
-12	BH-13-A	20	16
-MB	METHOD BLANK	<1	<1
Limit of Detection:		1	1

< Less than the indicated limit of detection (LOD)

Quality Assurance Results Summary  
for  
Clayton Project No. 91020.06

Clayton Lab Number: 9102006-08A  
Ext./Prep. Method: EPA7196  
Date: 02/19/91  
Analyst: SUE  
Std. Source: HACH 23AO

Analytical Method: EPA7196  
Date: 02/19/91  
Analyst: SUE  
Sample Matrix/Media: DI EXTRACT  
Units: MG/L

Analyte	Sample Result	Spike Level	Matrix Spike Result	MS Recovery (%)	Matrix Spike Duplicate Result	MSD Recovery (%)	Average Recovery (% R)	LCL (% R)	UCL (% R)	RPD (%)	UCL (%RPD)
CHROMIUM VI	ND	0.500	0.518	104	0.523	105	104	75	125	1.0	20

LCS = Laboratory Control Sample  
ND = Not detected at or above limit of detection

LCL = Lower Control Limit

UCL = Upper Control Limit  
SOR = Spike out of range due to high sample concentration

Quality Assurance Results Summary  
for  
Clayton Project No. 91020.06

Clayton Lab Number: 9102006-05A  
Ext./Prep. Method: EPA7196  
Date: 02/14/91  
Analyst: SUE  
Std. Source: HACH 23A0

Analytical Method: EPA7196  
Date: 02/14/91  
Analyst: SUE  
Sample Matrix/Media: SOIL  
Units: MG/KG

Analyte	Sample Result	Spike Level	Matrix Spike Result	MS Recovery (%)	Matrix Spike Duplicate Result	MSD Recovery (%)	Average Recovery (% R)	LCL (% R)	UCL (% R)	RPD (%)	UCL (%RPD)
CHROMIUM6	ND	5.00	4.75	95	4.95	99	97	75	125	4.1	20

LCS = Laboratory Control Sample  
ND = Not detected at or above limit of detection

LCL = Lower Control Limit

UCL = Upper Control Limit  
SOR = Spike out of range due to high sample concentration.



Quality Assurance Results Summary  
for  
Clayton Project No. 91020.06

Clayton Lab Number: 9102130-01A  
Ext./Prep. Method: EPA3010  
Date: 02/18/91  
Analyst: JSL  
Std. Source: VHGO309

Analytical Method: EPA6010  
Date: 02/21/91  
Analyst: HIN  
Sample Matrix/Media: STLC  
Units: MG/L

Analyte	Sample Result	Spike level	Matrix Spike Result	MS Recovery (%)	Matrix Spike Duplicate Result	MSD Recovery (%)	Average Recovery (% R)	LCL (% R)	UCL (% R)	RPD (%)	UCL (%RPD)
ANTIMONY	ND	10.0	10.0	100	9.98	100	100	75	125	0.2	20
BARIUM	10.0	10.0	19.5	95	19.3	93	94	75	125	1.0	20
BERYLLIUM	ND	10.0	9.08	91	8.98	90	90	75	125	1.1	20
CADMIUM	ND	10.0	10.1	101	10.1	101	101	75	125	0.1	20
CHROMIUM	ND	10.0	10.1	101	9.95	100	100	75	125	1.0	20
COBALT	0.500	10.0	10.6	101	10.5	100	100	75	125	1.0	20
COPPER	0.500	10.0	10.2	97	10.1	96	96	75	125	1.2	20
LEAD	ND	10.0	9.99	100	9.85	99	99	75	125	1.4	20
MOLYBDENUM	ND	10.0	9.90	99	9.85	99	99	75	125	0.5	20
NICKEL	0.600	10.0	10.4	98	9.92	93	96	75	125	4.7	20
SILVER	ND	8.00	7.66	96	7.56	95	95	75	125	1.3	20
THALLIUM	ND	10.0	9.82	98	9.81	98	98	75	125	0.1	20
VANADIUM	0.500	10.0	10.6	101	10.5	100	100	75	125	1.0	20
ZINC	0.400	10.0	10.5	101	10.4	100	100	75	125	1.2	20

LCS = Laboratory Control Sample  
ND = Not detected at or above limit of detection

LCL = Lower Control Limit

UCL = Upper Control Limit  
SOR = Spike out of range due to high sample concentration

Quality Assurance Results Summary  
for  
Clayton Project No. 91020.06

Clayton Lab Number: 9102006-05A  
Ext./Prep. Method: EPA3050  
Date: 02/18/92  
Analyst: JSL  
Std. Source: VH0309

Analytical Method: EPA6010  
Date: 02/19/91  
Analyst: JSL  
Sample Matrix/Media: SOIL  
Units: MG/KG

Analyte	Sample Result	Spike Level	Matrix Spike Result	MS Recovery (%)	Matrix Spike Duplicate Result	MSD Recovery (%)	Average Recovery (% R)	LCL (% R)	UCL (% R)	RPD (%)	UCL (%RPD)
ANTIMONY	ND	50.0	39.5	79	40.1	80	80	75	125	1.5	20
BARIUM	108	50.0	153	90	155	94	92	75	125	1.3	20
BERYLLIUM	0.500	50.0	41.7	82	41.7	82	82	75	125	0	20
CADMIUM	0.600	50.0	44.0	87	44.3	87	87	75	125	0.7	20
CHROMIUM	28.0	50.0	70.5	85	71.2	86	86	75	125	1.0	20
COBALT	14.0	50.0	56.4	85	57.0	86	85	75	125	1.1	20
COPPER	45.0	50.0	91.3	93	87.0	84	88	75	125	4.8	20
LEAD	10.0	50.0	51.8	84	50.7	81	83	75	125	2.1	20
MOLYBDENUM	ND	50.0	39.0	78	38.6	77	78	75	125	1.0	20
NICKEL	31.0	50.0	69.8	78	73.2	84	81	75	125	4.8	20
SILVER	ND	40.0	34.8	87	34.8	87	87	75	125	0	20
THALLIUM	ND	50.0	42.2	84	43.5	87	86	75	125	3.0	20
VANADIUM	60.0	50.0	104	88	106	92	90	75	125	1.9	20
ZINC	69.0	50.0	110	82	110	82	82	75	125	0	20

LCS = Laboratory Control Sample  
ND = Not detected at or above limit of detection

LCL = Lower Control Limit

UCL = Upper Control Limit  
SOR = Spike out of range due to high sample concentration.

### REQUEST FOR LABORATORY ANALYTICAL SERVICES

STUDY CO

REPORT RESULTS TO		Name <u>GUY KENNEDY</u> Title <u>STUDY CO</u>	
Company <u>CYRESS, CA</u>		Mailing Address <u>CYRESS, CA</u>	
City, State, Zip <u>CA</u>		Dept. <u>EE</u>	
Telephone No. <u>14-0435</u>		Telex No. <u>2-1-91</u>	
Date Results Required <u>14-0435</u>		Rush Charges Authorized? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Special Instructions: (method, limit of detection, etc.) <u>FAX RESULTS</u>		Samples are: (check if applicable) <input type="checkbox"/> Drinking Water <input type="checkbox"/> Collected in the State of New York	
Explanation of Preservative: <u>NONE</u>		Number of Containers <u>1</u>	
CLIENT SAMPLE IDENTIFICATION		ANALYSIS REQUESTED (Enter an 'X' in the box below to indicate request; Enter a 'P' if Preservative added)	
BH-10-A	DATE SAMPLED <u>2-1-91</u> MATRIX/MEDIA <u>Soil</u> AIR VOLUME (specify units)	<div style="border: 1px solid black; padding: 5px;"> <u>BH-10-A</u>  <u>1</u>  <u>0240</u>  <u>44B.1</u> </div>	
BH-10-B			
BH-10-C			
BH-10-D			
BH-10-E			
BH-10-F			
BH-12-A		<div style="border: 1px solid black; padding: 5px;"> <u>BH-12-A</u>  <u>1</u>  <u>0240</u>  <u>44B.1</u> </div>	
BH-12-B			
BH-12-C			
BH-12-D		<div style="border: 1px solid black; padding: 5px;"> <u>BH-12-D</u>  <u>1</u>  <u>0240</u>  <u>44B.1</u> </div>	
BH-12-E			
BH-12-F			
Relinquished by: <u>A.K. Kennedy</u>	Date/Time <u>2/5/91 15:30</u>	Received at Lab by: <u>Tony Salas</u>	
Relinquished by: <u>A.K. Kennedy</u>	Date/Time <u>2/5/91 15:30</u>	Received by: <u>Tony Salas</u>	
Method of Signment: <u>Hand Delivered</u>	Date/Time <u>2/5/91</u>	Sample Condition Upon Receipt <input type="checkbox"/> Acceptable <input type="checkbox"/> Other (explain) <u>Hand Delivered</u>	
Authorized by: <u>A.K. Kennedy</u>	Date <u>2/5/91</u>	Date/Time <u>2-5-91 10:30</u>	

Please return completed form and samples to one of the Clayton Environmental Consultants, Inc. labs listed below:

22345 Roehel Drive Novi, MI 48050 (313) 344-1770	Raritan Center 160 Fieldcrest Ave. Edison, NJ 08837 (201) 225-6040	400 Chastain Center Blvd., N.W. Suite 450 Kennesaw, GA 30144 (404) 499-7500	1252 Quarry Lane Pleasanton, CA 94566 (415) 426-2600
--	---	--	--

# Clayton

ENVIRONMENTAL  
CONSULTANTS

A Marsh & Mittenman Company

## REQUEST FOR LABORATORY ANALYTICAL SERVICES

STOODY CO.

Name <b>GUY RORINE</b>		Title		Purchase Order No.		Client Job No. <b>335080</b>	
Company		Dept. <b>EE</b>		Name		Client No.	
Mailing Address		City, State, Zip		Company		Batch No. <b>9102047</b>	
Telephone No.		Telefax No.		Address		Client No.	
Date Results Required: <b>12-1-91</b>		Rush Charges Authorized? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Phone Results <input type="checkbox"/>		Date Logged In <b>2-6-91</b> By <b>TS</b>	
Special Instructions: (method, limit of detection, etc.) <b>FAX RESULTS</b>				Samples are: <input type="checkbox"/> Drinking Water <input type="checkbox"/> Collected in the State of New York			
Explanation of Preservative: <b>NONE</b>				ANALYSIS REQUESTED (Enter an 'X' in the box below to indicate request. Enter a 'P' if Preservative added.)			
CLIENT SAMPLE IDENTIFICATION		DATE SAMPLED	MATRIX MEDIA	AIR VOLUME (specify units)	FOR LAB USE ONLY		
BH-12-E		2-1-91	Soil		10A		
BH-12-F					11A		
BH-13-A					12A		
BH-13-B					13A		
BH-13-C					14A		
BH-13-D					15A		
BH-13-E					16A		
BH-13-F		2-1-91	Soil		17A		
BH-10-G					18A		
BH-12-G					19A		
BH-13-G					20A		
Relinquished by: <b>G.R. RORINE</b>		Date/Time: <b>2/5/91 15:50</b>		Received by:		Date/Time: <b>2/5/91 10:30 AM</b>	
Relinquished by:		Date/Time:		Received at Lab by: <b>Teey Jakes</b>		Date/Time:	
Method of Shipment:		Date/Time:		Sample Condition Upon Receipt <input type="checkbox"/> Acceptable <input type="checkbox"/> Other (explain)		Date/Time:	
Authorized by: <b>G.R. RORINE</b>		Date: <b>2/5/91</b>		Sample Condition Upon Receipt <input type="checkbox"/> Acceptable <input type="checkbox"/> Other (explain)		Date/Time:	
(Client Signature Must Accompany Request)							

Please return completed form and samples to one of the Clayton Environmental Consultants, Inc. labs listed below:

22345 Roehel Drive	Raitan Center	400 Chastain Center Blvd., N.W.	1252 Quarry Lane
Novi, MI 48050	160 Fieldcrest Ave.	Suite 490	Pleasanton, CA 94566
(313) 344-1770	Edison, NJ 08837	Kennesaw, GA 30144	(415) 426-2600
	(201) 225-6040	(404) 499-7500	

### DISTRIBUTION:

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1252 Quarry Lane  
P.O. Box 9019  
Pleasanton, CA 94566  
(415) 426-2600  
Fax (415) 426-0106

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MAR 4 1991

**Clayton**  
ENVIRONMENTAL  
CONSULTANTS

February 26, 1991

Mr. Robert Zicker  
CLAYTON ENVIRONMENTAL CONSULTANTS, INC.  
5785 Corporate Ave., Suite 150  
Cypress, CA 90630

Client Ref. 33508.00  
Clayton Project No. 91021.27

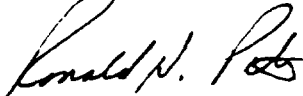
Dear Mr. Zicker:

Attached is our analytical laboratory report for the samples received on February 14, 1991. A copy of the Chain-of-Custody form acknowledging receipt of these samples is attached.

Please note that any unused portion of the samples will be disposed of 30 days after the date of this report, unless you have requested otherwise.

We appreciate the opportunity to be of assistance to you. If you have any questions, please contact Maryann Gambino, Client Services Supervisor, at (415) 426-2657.

Sincerely,



Ronald H. Peters, CIH  
Director, Laboratory Services  
Western Operations

RHP/tb  
Attachments

Results of Analysis  
for  
Stoody IndustryClient Reference: 33508.00  
Clayton Project No. 91021.27

Sample Identification:	MW-5D	Date Sampled:	02/13/91
Lab Number:	9102127-05A	Date Received:	02/14/91
Sample Matrix/Media:	WATER	Date Analyzed:	02/20/91
Analytical Method:	EPA 524.2		

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
<u>Volatile Organic Compounds</u>			
Benzene	71-43-2	ND	0.5
Bromobenzene	108-86-1	ND	0.5
Bromochloromethane	74-97-5	ND	0.5
Bromodichloromethane	75-27-4	ND	0.5
Bromoform	75-25-2	ND	0.5
Bromomethane	74-83-9	ND	0.5
n-Butylbenzene	104-51-8	ND	0.5
sec-Butylbenzene	135-98-8	ND	0.5
tert-Butylbenzene	98-06-6	ND	0.5
Carbon tetrachloride	56-23-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.5
Chloroethane	75-00-3	ND	0.5
Chloroform	67-66-3	0.7	0.5
Chloromethane	74-87-3	ND	0.5
2-Chlorotoluene	95-49-8	ND	0.5
4-Chlorotoluene	106-43-4	ND	0.5
Dibromochloromethane	124-48-1	ND	0.5
1,2-Dibromo-3-chloropropane	96-12-8	ND	0.5
1,2-Dibromoethane	106-93-4	ND	0.5
Dibromomethane	74-95-3	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-7	ND	0.5
1,4-Dichlorobenzene	106-46-7	ND	0.5
Dichlorodifluoromethane	75-71-8	ND	0.5
1,1-Dichloroethane	75-35-3	ND	0.5
1,2-Dichloroethane	107-06-2	ND	0.5
1,1-Dichloroethene	75-35-4	16	0.5
trans-1,2-Dichloroethene	156-60-5	ND	0.5
cis-1,2-Dichloroethene	156-59-2	2.1	0.5
1,2-Dichloroethene (total)	540-59-0	2.1	0.5

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry  
(continued)

Client Reference: 33508.00

Sample Identification: MW-5D

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
1,2-Dichloropropane	78-87-5	ND	0.5
1,3-Dichloropropane	142-28-9	ND	0.5
2,2-Dichloropropane	594-20-7	ND	0.5
1,1-Dichloropropene	563-58-6	ND	0.5
Ethylbenzene	100-41-4	ND	0.5
c-1,3-dichloropropene	10061-01-5	ND	0.5
t-1,3-dichloropropene	10061-02-6	ND	0.5
Hexachlorobutadiene	87-68-3	ND	0.5
Isopropylbenzene	98-82-8	ND	0.5
p-Isopropyltoluene	99-87-6	ND	0.5
Methylene chloride	75-09-2	ND	0.5
Naphthalene	91-20-3	ND	0.5
n-Propylbenzene	103-65-1	ND	0.5
Styrene	100-42-5	ND	0.5
1,1,2,2-Tetrachloroethane	79-32-5	ND	0.5
1,1,1,2-Tetrachloroethane	630-20-6	ND	0.5
Tetrachloroethene	127-18-4	100	0.5
Toluene	108-88-3	ND	0.5
1,2,3-Trichlorobenzene	87-61-6	ND	0.5
1,2,4-Trichlorobenzene	120-82-1	ND	0.5
1,1,1-Trichloroethane	71-55-6	1.8	0.5
1,1,2-Trichloroethane	79-00-5	ND	0.5
Trichloroethene	79-01-6	34	0.5
Trichlorofluoromethane	75-69-4	2.2	0.5
1,2,3-Trichloropropane	96-18-4	ND	0.5
1,2,4-Trimethylbenzene	95-63-6	ND	0.5
1,3,5-Trimethylbenzene	108-67-8	ND	0.5
Vinyl chloride	75-01-4	ND	0.5
o-Xylene	95-47-6	ND	0.5
p,m-Xylenes		ND	0.5

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91021.27

Sample Identification:	1-TRIP BLANK	Date Sampled:	02/13/91
Lab Number:	9102127-06A	Date Received:	02/14/91
Sample Matrix/Media:	WATER	Date Analyzed:	02/15/91
Analytical Method:	EPA 524.2		

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
<u>Volatile Organic Compounds</u>			
Benzene	71-43-2	ND	0.5
Bromobenzene	108-86-1	ND	0.5
Bromochloromethane	74-97-5	ND	0.5
Bromodichloromethane	75-27-4	ND	0.5
Bromoform	75-25-2	ND	0.5
Bromomethane	74-83-9	ND	0.5
n-Butylbenzene	104-51-8	ND	0.5
sec-Butylbenzene	135-98-8	ND	0.5
tert-Butylbenzene	98-06-6	ND	0.5
Carbon tetrachloride	56-23-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.5
Chloroethane	75-00-3	ND	0.5
Chloroform	67-66-3	ND	0.5
Chloromethane	74-87-3	ND	0.5
2-Chlorotoluene	95-49-8	ND	0.5
4-Chlorotoluene	106-43-4	ND	0.5
Dibromochloromethane	124-48-1	ND	0.5
1,2-Dibromo-3-chloropropane	96-12-8	ND	0.5
1,2-Dibromoethane	106-93-4	ND	0.5
Dibromomethane	74-95-3	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-7	ND	0.5
1,4-Dichlorobenzene	106-46-7	ND	0.5
Dichlorodifluoromethane	75-71-8	ND	0.5
1,1-Dichloroethane	75-35-3	ND	0.5
1,2-Dichloroethane	107-06-2	ND	0.5
1,1-Dichloroethene	75-35-4	ND	0.5
trans-1,2-Dichloroethene	156-60-5	ND	0.5
cis-1,2-Dichloroethene	156-59-2	ND	0.5
1,2-Dichloroethene (total)	540-59-0	ND	0.5

ND Not detected at or above limit of detection  
-- Information not available or not applicable



Results of Analysis  
for  
Stoody Industry  
(continued)

Client Reference: 33508.00

Sample Identification: 1-TRIP BLANK

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
1,2-Dichloropropane	78-87-5	ND	0.5
1,3-Dichloropropane	142-28-9	ND	0.5
2,2-Dichloropropane	594-20-7	ND	0.5
1,1-Dichloropropene	563-58-6	ND	0.5
Ethylbenzene	100-41-4	ND	0.5
c-1,3-dichloropropene	10061-01-5	ND	0.5
t-1,3-dichloropropene	10061-02-6	ND	0.5
Hexachlorobutadiene	87-68-3	ND	0.5
Isopropylbenzene	98-82-8	ND	0.5
p-Isopropyltoluene	99-87-6	ND	0.5
Methylene chloride	75-09-2	1.2	0.5
Naphthalene	91-20-3	ND	0.5
n-Propylbenzene	103-65-1	ND	0.5
Styrene	100-42-5	ND	0.5
1,1,2,2-Tetrachloroethane	79-32-5	ND	0.5
1,1,1,2-Tetrachloroethane	630-20-6	ND	0.5
Tetrachloroethene	127-18-4	0.7	0.5
Toluene	108-88-3	ND	0.5
1,2,3-Trichlorobenzene	87-61-6	ND	0.5
1,2,4-Trichlorobenzene	120-82-1	ND	0.5
1,1,1-Trichloroethane	71-55-6	ND	0.5
1,1,2-Trichloroethane	79-00-5	ND	0.5
Trichloroethene	79-01-6	ND	0.5
Trichlorofluoromethane	75-69-4	ND	0.5
1,2,3-Trichloropropane	96-18-4	ND	0.5
1,2,4-Trimethylbenzene	95-63-6	ND	0.5
1,3,5-Trimethylbenzene	108-67-8	ND	0.5
Vinyl chloride	75-01-4	ND	0.5
o-Xylene	95-47-6	ND	0.5
p,m-Xylenes		ND	0.5

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91021.27

Sample Identification:	3-FIELD BLANK	Date Sampled:	02/13/91
Lab Number:	9102127-07A	Date Received:	02/14/91
Sample Matrix/Media:	WATER	Date Analyzed:	02/15/91
Analytical Method:	EPA 524.2		

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
<u>Volatile Organic Compounds</u>			
Benzene	71-43-2	ND	0.5
Bromobenzene	108-86-1	ND	0.5
Bromochloromethane	74-97-5	ND	0.5
Bromodichloromethane	75-27-4	ND	0.5
Bromoform	75-25-2	ND	0.5
Bromomethane	74-83-9	ND	0.5
n-Butylbenzene	104-51-8	ND	0.5
sec-Butylbenzene	135-98-8	ND	0.5
tert-Butylbenzene	98-06-6	ND	0.5
Carbon tetrachloride	56-23-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.5
Chloroethane	75-00-3	ND	0.5
Chloroform	67-66-3	ND	0.5
Chloromethane	74-87-3	ND	0.5
2-Chlorotoluene	95-49-8	ND	0.5
4-Chlorotoluene	106-43-4	ND	0.5
Dibromochloromethane	124-48-1	0.6	0.5
1,2-Dibromo-3-chloropropane	96-12-8	ND	0.5
1,2-Dibromoethane	106-93-4	ND	0.5
Dibromomethane	74-95-3	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-7	ND	0.5
1,4-Dichlorobenzene	106-46-7	ND	0.5
Dichlorodifluoromethane	75-71-8	ND	0.5
1,1-Dichloroethane	75-35-3	ND	0.5
1,2-Dichloroethane	107-06-2	ND	0.5
1,1-Dichloroethene	75-35-4	ND	0.5
trans-1,2-Dichloroethene	156-60-5	ND	0.5
cis-1,2-Dichloroethene	156-59-2	ND	0.5
1,2-Dichloroethene (total)	540-59-0	ND	0.5

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry  
(continued)

Client Reference: 33508.00

Sample Identification: 3-FIELD BLANK

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
1,2-Dichloropropane	78-87-5	ND	0.5
1,3-Dichloropropane	142-28-9	ND	0.5
2,2-Dichloropropane	594-20-7	ND	0.5
1,1-Dichloropropene	563-58-6	ND	0.5
Ethylbenzene	100-41-4	ND	0.5
c-1,3-dichloropropene	10061-01-5	ND	0.5
t-1,3-dichloropropene	10061-02-6	ND	0.5
Hexachlorobutadiene	87-68-3	ND	0.5
Isopropylbenzene	98-82-8	ND	0.5
p-Isopropyltoluene	99-87-6	ND	0.5
Methylene chloride	75-09-2	1.1	0.5
Naphthalene	91-20-3	ND	0.5
n-Propylbenzene	103-65-1	ND	0.5
Styrene	100-42-5	ND	0.5
1,1,2,2-Tetrachloroethane	79-32-5	ND	0.5
1,1,1,2-Tetrachloroethane	630-20-6	ND	0.5
Tetrachloroethene	127-18-4	1.8	0.5
Toluene	108-88-3	ND	0.5
1,2,3-Trichlorobenzene	87-61-6	ND	0.5
1,2,4-Trichlorobenzene	120-82-1	ND	0.5
1,1,1-Trichloroethane	71-55-6	ND	0.5
1,1,2-Trichloroethane	79-00-5	ND	0.5
Trichloroethene	79-01-6	ND	0.5
Trichlorofluoromethane	75-69-4	ND	0.5
1,2,3-Trichloropropane	96-18-4	ND	0.5
1,2,4-Trimethylbenzene	95-63-6	ND	0.5
1,3,5-Trimethylbenzene	108-67-8	ND	0.5
Vinyl chloride	75-01-4	ND	0.5
o-Xylene	95-47-6	ND	0.5
p,m-Xylenes		ND	0.5

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody IndustryClient Reference: 33508.00  
Clayton Project No. 91021.27

Sample Identification:	METHOD BLANK	Date Sampled:	--
Lab Number:	9102127-12A	Date Received:	--
Sample Matrix/Media:	WATER	Date Analyzed:	02/20/91
Analytical Method:	EPA 524.2		

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
<u>Volatile Organic Compounds</u>			
Benzene	71-43-2	ND	0.5
Bromobenzene	108-86-1	ND	0.5
Bromochloromethane	74-97-5	ND	0.5
Bromodichloromethane	75-27-4	ND	0.5
Bromoform	75-25-2	ND	0.5
Bromomethane	74-83-9	ND	0.5
n-Butylbenzene	104-51-8	ND	0.5
sec-Butylbenzene	135-98-8	ND	0.5
tert-Butylbenzene	98-06-6	ND	0.5
Carbon tetrachloride	56-23-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.5
Chloroethane	75-00-3	ND	0.5
Chloroform	67-66-3	ND	0.5
Chloromethane	74-87-3	ND	0.5
2-Chlorotoluene	95-49-8	ND	0.5
4-Chlorotoluene	106-43-4	ND	0.5
Dibromochloromethane	124-48-1	ND	0.5
1,2-Dibromo-3-chloropropane	96-12-8	ND	0.5
1,2-Dibromoethane	106-93-4	ND	0.5
Dibromomethane	74-95-3	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-7	ND	0.5
1,4-Dichlorobenzene	106-46-7	ND	0.5
Dichlorodifluoromethane	75-71-8	ND	0.5
1,1-Dichloroethane	75-35-3	ND	0.5
1,2-Dichloroethane	107-06-2	ND	0.5
1,1-Dichloroethene	75-35-4	ND	0.5
trans-1,2-Dichloroethene	156-60-5	ND	0.5
cis-1,2-Dichloroethene	156-59-2	ND	0.5
1,2-Dichloroethene (total)	540-59-0	ND	0.5

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry  
(continued)

Client Reference: 33508.00

Sample Identification: METHOD BLANK

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
1,2-Dichloropropane	78-87-5	ND	0.5
1,3-Dichloropropane	142-28-9	ND	0.5
2,2-Dichloropropane	594-20-7	ND	0.5
1,1-Dichloropropene	563-58-6	ND	0.5
Ethylbenzene	100-41-4	ND	0.5
c-1,3-dichloropropene	10061-01-5	ND	0.5
t-1,3-dichloropropene	10061-02-6	ND	0.5
Hexachlorobutadiene	87-68-3	ND	0.5
Isopropylbenzene	98-82-8	ND	0.5
p-Isopropyltoluene	99-87-6	ND	0.5
Methylene chloride	75-09-2	ND	0.5
Naphthalene	91-20-3	ND	0.5
n-Propylbenzene	103-65-1	ND	0.5
Styrene	100-42-5	ND	0.5
1,1,2,2-Tetrachloroethane	79-32-5	ND	0.5
1,1,1,2-Tetrachloroethane	630-20-6	ND	0.5
Tetrachloroethene	127-18-4	ND	0.5
Toluene	108-88-3	ND	0.5
1,2,3-Trichlorobenzene	87-61-6	ND	0.5
1,2,4-Trichlorobenzene	120-82-1	ND	0.5
1,1,1-Trichloroethane	71-55-6	ND	0.5
1,1,2-Trichloroethane	79-00-5	ND	0.5
Trichloroethene	79-01-6	ND	0.5
Trichlorofluoromethane	75-69-4	ND	0.5
1,2,3-Trichloropropane	96-18-4	ND	0.5
1,2,4-Trimethylbenzene	95-63-6	ND	0.5
1,3,5-Trimethylbenzene	108-67-8	ND	0.5
Vinyl chloride	75-01-4	ND	0.5
o-Xylene	95-47-6	ND	0.5
p,m-Xylenes		ND	0.5

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91021.27

Sample Identification:	See below	Date Sampled:	02/13/91
Lab Number:	9102127	Date Received:	02/14/91
Sample Matrix/Media:	Water	Date Analyzed:	02/18/91
Analytical Method:	EPA 418.1		

Laboratory No.	Sample Identification	Total Recoverable Petroleum Hydrocarbons (mg/L)
-01	MW-5A	<1
-02	MW-5B	<1
-03	1-FIELD BLANK	<1
-04	3-TRIP BLANK	<1
-MB	METHOD BLANK	<1
Limit of Detection:		1

ND = Not detected at or above limit of detection

Results of Analysis  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91021.27

Sample Identification:	See below	Date Sampled:	02/13/91
Lab Number:	9102127	Date Received:	02/14/91
Sample Matrix/Media:	Water	Date Analyzed:	See below
Analytical Method:	See below		

Laboratory No.	Sample Identification	pH (Standard Units)	Turbidity (N.T.U.)
-08	MW-5H	7.5	0.5
-09	MW-5I	7.4	1.5
-10	2-FIELD BLANK	7.9	8.3
-11	2-TRIP BLANK	8.3	<0.1
-MB	METHOD BLANK	--	<0.1
Limit of Detection:		--	0.1
Method Reference:		EPA 150.1	EPA 180.1
Date Analyzed:		02/14/91	02/15/91

< Less than the indicated limit of detection (LOD)

-- Information not available or not applicable

Clayton Environmental Consultants, Inc.

## Surrogate Percent Recovery

## Volatile Organics

EPA 524.2

Instrument :HP 5995

Matrix:Water

Analysis Date:02/15-02/20/91

Analyst: SS

Lab No.	Sample I.D.	SU1	SU2
9102127-MB	02/15 MB	110	110
9102127-06A	1-TRIP BLANK	90	90
9102127-07A	3FIELD BLANK	105	102
9102105-01A	W-873-03	96	96
9102105-01AS	MATRIX SPIKE	94	93
9102105-01AD	MATRIX SPDUP	103	104
9102127-MB	02/20 MB	106	106
9102127-05C	MW-5F	88	85
9102127-05C	MW-5F 5XDIL	103	99

## Q.C.LIMITS ACCEPTABLE RANGE:

(SU1) BROMOFLUOROBENZENE( 80-120)

(SU2) 1,4-DICHLOROBENZENE-d4( 80-120)

SPK SOURCE:W#494



Clayton Environmental Consultants, Inc.

## Matrix Spike/Spike Duplicate Recovery

Volatile Organics  
EPA 524.2

File Name: 9102105-01A

Analysis Date: 02/15/91

Spike: 9102105-01A MATRIX SPIKE

Matrix: WATER

Duplicate: 9102105-01A MATRIX SPIKE DUP

Units: UG/L

Sample I.D.: W-873-03

Analyst: SS

Instrument: HP5995

Compound	Conc. Sample	Conc. Spiked	Conc. MS	Percent Recovered
1,1-Dichloroethene	0.0	10.0	6.2	62.0
Trichloroethene	0.0	10.0	9.2	92.0
Benzene	0.0	10.0	9.9	99.0
Toluene	0.0	10.0	9.8	97.9
Chlorobenzene	0.0	10.0	9.2	91.5

Compound	Conc. MSD	Percent Recovered	RPD
1,1-Dichloroethene	6.3	63.0	1.6
Trichloroethene	9.7	97.4	5.7
Benzene	10.8	107.7	8.4
Toluene	10.9	108.5	10.3
Chlorobenzene	10.6	106.2	14.9

SPK SOURCE: W#499

Q.C. Limits :

	% Recovery	RPD
1,1-Dichloroethene	33.8-151	42
Trichloroethene	70.8-111	19
Benzene	70.3-122	16
Toluene	70.6-125	19
Chlorobenzene	82.3-125	20

Quality Assurance Results Summary  
for  
Clayton Project No. 91021.27

Clayton Lab Number: 9102127  
Ext./Prep. Method: EPA418.1  
Date: 02/18/91  
Analyst: AM  
Std. Source: S360

Analytical Method: EPA418.1  
Date: 02/18/91  
Analyst: AM  
Sample Matrix/Media: WATER  
Units: MG/L

Analyte	Sample Result	Spike Level	Matrix Spike Result	MS Recovery (%)	Matrix Spike Duplicate Result	MSD Recovery (%)	Average Recovery (% R)	LCL (% R)	UCL (% R)	RPD (%)	UCL (%RPD)
TOTAL PETROLEUM HYDROCARBONS	ND	25.4	24.4	96	25.2	99	98	85	115	3.2	25

LCS = Laboratory Control Sample  
ND = Not detected at or above limit of detection

LCL = Lower Control Limit

UCL = Upper Control Limit  
SOR = Spike out of range due to high sample concentration

**A Marsh & McLennan Company**

# REQUEST FOR LABORATORY ANALYTICAL SERVICES

For Clayton Use Only Page 1 of 2

Project No.

Batch No. 9102127

**Client No.**

Date Received 2/14/91

By TS

Date Logged In

By sl

Purchase Order No.		Client Job No. 33508.00		Name Robert Eicker		Title AEC								
SEND INVOICE TO	Name Robert Eicker		Company Clayton		Dept. EE									
	Company Clayton		Mailing Address Cypress		City, State, Zip									
	Address Cypress		Telephone No.		Telefax No.									
	City, State, Zip													
Date Results Required: 2/27/91		Rush Charges Authorized? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		ANALYSIS REQUESTED (Enter an 'X' in the box below to indicate request; Enter a 'P' if Preservative added*)										
Special Instructions: (method, limit of detection, phone results, rush results, etc.) No preservatives Some samples may be "HOT"				Number of Containers								FOR LAB USE ONLY		
* Explanation of Preservative:														
CLIENT SAMPLE IDENTIFICATION		DATE SAMPLED	MATRIX/MEDIA	AIR VOLUME (specify units)										
mw-5A		2-13-91	water	WFA/HP	1	X								01A
mw-5B					1	X								02
1-Field Blank					1	X								03
3-Trip Blank					1	X								04
mw-5D				12 gal	1		X							05A
mw-5E				40 ml	1		X							06B
mw-5F					1		X							07C
mw-5G					1		X							08D
1-Trip Blank					1		X							09A
3-Field Blank					1		X							10V
CHAIN OF CUSTODY (if required)	Relinquished by: Robert Eicker		Date/Time 2-15-91 15:20		Received by: Tony Salvo				Date/Time 2/14/91					
	Relinquished by:		Date/Time		Received at lab by:				Date/Time 10:30am					
	Method of Shipment:				Sample condition upon receipt:									
Authorized by: Robert Eicker		Date 2-15-91												
								OK						

**Please return completed form and samples to one of the Clayton Environmental Consultants, Inc. labs listed below:**

**22345 Roethel Drive  
Novi, MI 48050  
(313) 344-1770**

**Raritan Center**  
160 Fieldcrest Ave.  
Edison, NJ 08837  
(201) 225-6040

**400 Chastain Center Blvd., N.W.  
Suite 490  
Kennesaw, GA 30144  
(404) 499-7500**

**1252 Quarry Lane  
Pleasanton, CA 94566  
(415) 426-2600**

**DISTRIBUTION:**

**WHITE - Clayton Laboratory**  
**YELLOW - Clayton Accounting**  
**PINK - Client Retains**

**ENVIRONMENTAL  
CONSULTANTS**

**A Marsh & McLennan Company**

For Clayton Use Only		Page <u>2</u>	of <u>2</u>
Project No.			
Batch No.		<u>9108127</u>	
Client No.			
Date Received		<u>2/14/91</u>	
Date Logged In		<u>2</u>	
		By	<u>TS</u>
		By	<u>N1</u>

1252 Quarry Lane  
Pleasanton, CA 94566  
(415) 426-2600

- WHITE Clayton Laboratory
- YELLOW Clayton Accounting
- PINK Client Relations

## CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

## QA PACKAGE INDEX

CLAYTON WORKORDER NO. 91020.47

[illegible]

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Quality Assurance Results Summary  
for  
Clayton Project No. 9102047

Clayton Lab Number:	9102047	Analytical Method:	EPA418.1
Ext / Prop. Method:	EPA418.1	Date:	02/03/91
Date:	02/11/91	Analyst:	AM
Std. Source:	S360	Sample Matrix/Media:	SOIL
		Units:	MG/KG

Analyte	Sample Result	Spike Level	Matrix Spike Result	MS Recovery (%)	MS Duplicate Result	MSD Recovery (%)	Average Recovery (%) R	LCL (%) R	UCL (%) R	RPD (%)	UCL (%) RPD
TOTAL PETROLEUM HYDROCARBONS	11.7	254	281	106	293	111	109	85	115	4.2	25

LCS = Laboratory Control Sample  
ND = Not detected at or above limit of detection

LCL = Lower Control Limit

UCL = Upper Control Limit  
SCR = Spike out of range due to high sample concentration

00000002

Surrogate Percent Recovery

Volatile Organics

EPA 8240

Instrument :HP5995

Matrix: SOIL

Analysis Date:02/12-02/13/91

Analyst: SS

Lab No.	Sample I.D.	SU1	SU2	SU3
9102047-MB	METHOD BLANK	100	104	98
9102047-01A	BH-10-B	98	90	84
9102047-02A	BH-10-C	100	84	74
9102047-03A	BH-10-D	120	70	72
9102047-03A	DIL	126	88	90
9102047-04A	BH-10-E	102	94	84
9102047-05A	BH-10-F	98	96	90
9102047-05AS	MATRIX SPK	100	102	96
9102047-05AD	MATRIX SPK D	98	100	90
9102047-06A	BH-12-A	102	90	76
9102047-06A	DIL	104	92	74
9102047-07A	BH-12-B	122	84	86
9102047-08A	BH-12-C	120	84	86
9102047-09A	BH-12-D	102	100	96
9102047-10A	BH-12-E	122	80	84
9102047-11A	BH-12-F	106	92	90
9102047-12A	BH-13-A	102	94	72
9102047-12A	DIL	108	84	70
9102047-13A	BH-13-B	106	92	82
9102047-14A	BH-13-C	104	106	88
9102047-15A	BH-13-D	106	102	88
9102047-16A	BH-13-E	106	66	114
9102047-17A	BH-13-F	108	98	88
9102047-18A	BH-10-G	102	94	90
9102047-19A	BH-12-G	106	84	84
9102047-20A	BH-13-G	104	88	80

Q.C. Limits

(SU1) 1,2-Dichloroethane-d4	SOIL (31-159)	WATER (57-163)
(SU2) Toluene-d8	(77-139)	(74-129)
(SU3) Bromofluorobenzene	(47-119)	(60-132)

Surr.Source: Std.No.W470

Clayton Environmental Consultants, Inc.

## Matrix Spike/Spike Duplicate Recovery

## Volatile Organics

EPA 8240

File Name: 9102047-05A

Analysis Date: 02/12/91

Spike: 9102047-05A MATRIX SPIKE

Matrix: SOIL

Duplicate: 9102047-05A MATRIX SPIKE DUP

Units: MG/KG

Sample I.D.: BH-10-F

Analyst: SS

Instrument: HP5995

Compound	Conc. Sample	Conc. Spiked	Conc. MS	Percent Recovered
1,1-Dichloroethene	0.000	0.050	0.059	118.000
Trichloroethene	0.000	0.050	0.046	92.000
Benzene	0.000	0.050	0.052	103.400
Toluene	0.000	0.050	0.050	100.000
Chlorobenzene	0.000	0.050	0.048	95.200

Compound	Conc. MSD	Percent Recovered	RPD
1,1-Dichloroethene	0.055	110.000	7.0
Trichloroethene	0.044	88.000	4.4
Benzene	0.049	98.000	5.4
Toluene	0.050	100.000	0.0
Chlorobenzene	0.045	89.600	6.1

SPK SOURCE: W#499

Q.C. Limits :

	% Recovery	RPD
1,1-Dichloroethene	36.8-167	80
Trichloroethene	55.3-128	19
Benzene	57.4-119	19
Toluene	57.9-130	43
Chlorobenzene	69.9-129	33



0000004

Quality Assurance Results Summary  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.47

Lab Number: Calibration Check Standard Date Analyzed: 02/08/91  
Analytical Method: EPA 418.1 (Modified) Unit: mg/100 mL

Analyte	True Value	Measured Value	Recovery (%)
Total Petroleum Hydrocarbons	20.57	21.1	103

Accuracy Control Limit: (%) 85-115

## HSL Compounds

Case No: \_\_\_\_\_ Calibration Date: 02/12/91  
 Contractor: CLAYTON \_\_\_\_\_ Time: 09:57  
 Contract No: \_\_\_\_\_ Laboratory ID: 49888  
 Instrument ID: HP-5995 \_\_\_\_\_ Initial Calibration Date: 01/21/91

000005

Minimum RF for SPCC is .25      Maximum % Diff for CCC is 25%

Compound	RF	RF	%Diff	CCC SPCC
Dichlorodifluoromethane	-	-	-	
Chloromethane	1.59060	2.03383	27.06	**
Bromomethane	1.37167	1.01323	40.71	
Vinyl Chloride	2.18292	2.19344	.62	*
Chloroethane	1.06700	1.34400	67.76	
Trichlorofluoromethane	.98760	1.26019	26.20	
Acrolein	.03717	.07797	109.75	
Freon 113	1.20177	1.66124	38.23	
Acrylonitrile	.54815	.55762	1.73	
Methylene Chloride	1.59690	2.39043	49.60	
Acetone	1.27217	1.44166	13.32	
Carbon Disulfide	3.51357	4.70559	34.20	
1,1-Dichloroethene	.65379	1.22933	87.09	*
1,1-Dichloroethane	4.21624	4.49299	6.56	**
Trans-1,2-Dichloroethene	1.46897	1.50993	2.79	
Cis-1,2-Dichloroethene	1.03665	1.94046	8.11	
Chloroform	3.77029	3.93702	4.42	
1,2-Dichloroethane-d4	2.93719	3.20493	9.12	(Conc=50.00)
1,2-Dichloroethane	3.90720	4.22351	8.10	
2-Butanone	.06296	.05273	16.25	
1,1,1-Trichloroethane	.58003	.60565	4.42	
Carbon Tetrachloride	.53754	.54850	2.04	
Vinyl Acetate	-	-	-	
Bromodichloromethane	.68163	.73161	7.33	
2-Chloroethylvinylether	.37183	.41350	11.20	
1,2-Dichloropropane	.53400	.58680	9.89	*
Cis-1,3-Dichloropropene	.66293	.87711	31.12	(Conc=80.00)
Trichloroethene	.37690	.39153	3.88	
Toluene-d8	1.21743	1.23455	1.41	(Conc=50.00)
Dibromochloromethane	.55298	.55393	.17	
1,1,2-Trichloroethane	.36440	.38629	6.00	
Benzene	1.37045	1.46091	5.98	

RF - Response Factor from daily standard file at 50.00 UG/L

RF - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (\*) SPCC - System Performance Check Compounds (\*\*)

Continuing Calibration Check  
HSL Compounds

Case No: \_\_\_\_\_ Calibration Date: 02/10/91  
Contractor: CLAYTON \_\_\_\_\_ Time: 00:57  
Contract No: \_\_\_\_\_ Laboratory ID: 40600  
Instrument ID: HP-5995 \_\_\_\_\_ Initial Calibration Date: 01/31/91

4000000

Minimum RF for SPCC is .25 Maximum % Diff for CCC is 25%

Compound	RF	RF	%Diff	CCC	SPCC
trans-1,3-Dichloropropene	.64123	.82984	29.41		(Cone=20.00)
Bromoform	.41930	.41090	1.93	**	
4-Methyl-2-Pentanone	.79553	.87974	10.59		
2-Hexanone	.76331	.76178	.20		
Tetrachloroethene	.34503	.35471	2.80		
1,1,2,2-Tetrachloroethane	.56361	.60732	7.74	**	
Toluene	.82923	.90734	9.42	*	
Chlorobenzene	.98930	1.06222	7.37	**	
Ethylbenzene	.48317	.52180	7.95	*	
Styrene	1.06224	1.14892	7.93		
m/p Xylene	.54913	.60055	9.36		(Cone=100.00)
o Xylene	.59095	.62300	5.42		
Bromofluorobenzene	.47901	.46421	3.09		(Cone=50.00)
1,3-Dichlorobenzene	.86035	.90086	4.71		
1,4-Dichlorobenzene	.84305	.85095	.94		
1,2-Dichlorobenzene	.79938	.82603	3.37		

Note: Increased sensitivity for some CCC results in some responses outside control limits.  
These compounds were not detected in any samples at increased instrument sensitivity.

RF - Response Factor from daily standard file at 50.00 UG/L

RF - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (\*) SPCC - System Performance Check Compounds (\*\*)

# QUANT REPORT

Operator ID: AMY      Quant Rev: 6      Quant Time: 910212 09:18  
 Output File: >VS686::04      Injected at: 910212 08:57  
 Data File: >VS686::04      Dilution Factor: 1.00000  
 Name: SUPPB VOA STD  
 ID:

000007

File: ID\_VOA::QT  
 Title: VOA SINGLE POINT DAILY CALIBRATION  
 Test Calibration: 910211 15:54

Compound	R.T.	q ion	Area	Conc	Units	q
1-bromochloromethane	0.65	128.0	53380	50.00	UG/L	99
1-chloromethane	2.17	50.0	108557	70.03	UG/L	98
1-bromomethane	2.75	94.0	43412	32.20	UG/L	95
vinyl chloride	2.35	62.0	117246	57.20	UG/L	93
trichlorofluoromethane	3.26	101.0	67589	38.96	UG/L	95
Acrolein	3.92	56.0	4162	166.62	UG/L	100
Freon 113	4.05	101.0	88677	80.41	UG/L	94
Acrylonitrile	5.05	53.0	29766	51.30	UG/L	95
Methylene chloride	4.69	84.0	127601	94.89	UG/L	70
Acetone	4.16	43.0	76956	100.66	UG/L	78
Carbon Disulfide	4.17	76.0	255455	83.92	UG/L	100
1,1-dichloroethene	3.97	96.0	65566	94.66	UG/L	79
1,1-dichloroethane	5.58	63.0	239835	52.91	UG/L	92
trans-1,2-Dichloroethene	5.02	96.0	80600	52.57	UG/L	67
cis-1,2-Dichloroethene	6.34	96.0	103048	52.38	UG/L	72
chloroform	6.81	83.0	210158	51.42	UG/L	92
1,2-dichloroethane-d4	7.44	65.0	171079	51.42	UG/L	83
1,2-dichloroethane	7.54	62.0	225451	50.11	UG/L	93
1,4-Difluorobenzene	8.07	114.0	252413	50.00	UG/L	100
2-butanone	6.40	72.0	13310	51.83	UG/L	84
1,1,1-trichloroethane	6.97	97.0	152673	49.90	UG/L	81
Carbon tetrachloride	7.18	117.0	138448	49.38	UG/L	88
bromodichloromethane	9.19	83.0	184668	49.43	UG/L	91
2-chloroethylvinylether	9.68	63.0	104372	50.79	UG/L	87
1,2-dichloropropane	8.74	63.0	148117	50.53	UG/L	89
cis-1,3-Dichloropropene	9.86	75.0	354230	82.86	UG/L	92
trichloroethene	8.40	130.0	98827	51.71	UG/L	92
Toluene-d8	10.24	98.0	311616	49.08	UG/L	94
1-bromochloromethane	11.68	129.0	139819	49.20	UG/L	91
1,1,2-trichloroethane	11.06	97.0	97502	50.22	UG/L	99
benzene	7.48	78.0	368753	50.99	UG/L	100
trans-1,3-Dichloropropene	10.77	75.0	83785	20.18	UG/L	94
bromoform	14.18	173.0	103736	50.75	UG/L	97
1-chlorobenzene-d5	12.64	117.0	256251	50.00	UG/L	93
4-Methyl-2-Pentanone	10.14	43.0	225435	52.01	UG/L	69
2-hexanone	11.49	43.0	195207	63.28	UG/L	73
tetrachloroethene	11.21	164.0	90894	51.10	UG/L	96
1,1,2,2-tetrachloroethane	15.16	83.0	155627	50.14	UG/L	95
Toluene	10.35	92.0	232508	50.62	UG/L	84
chlorobenzene	12.68	112.0	272194	51.51	UG/L	91
Ethylbenzene	12.90	106.0	133660	52.02	UG/L	94
styrene	13.86	104.0	293796	51.45	UG/L	86
M/P xylene	13.12	106.0	307785	102.03	UG/L	87

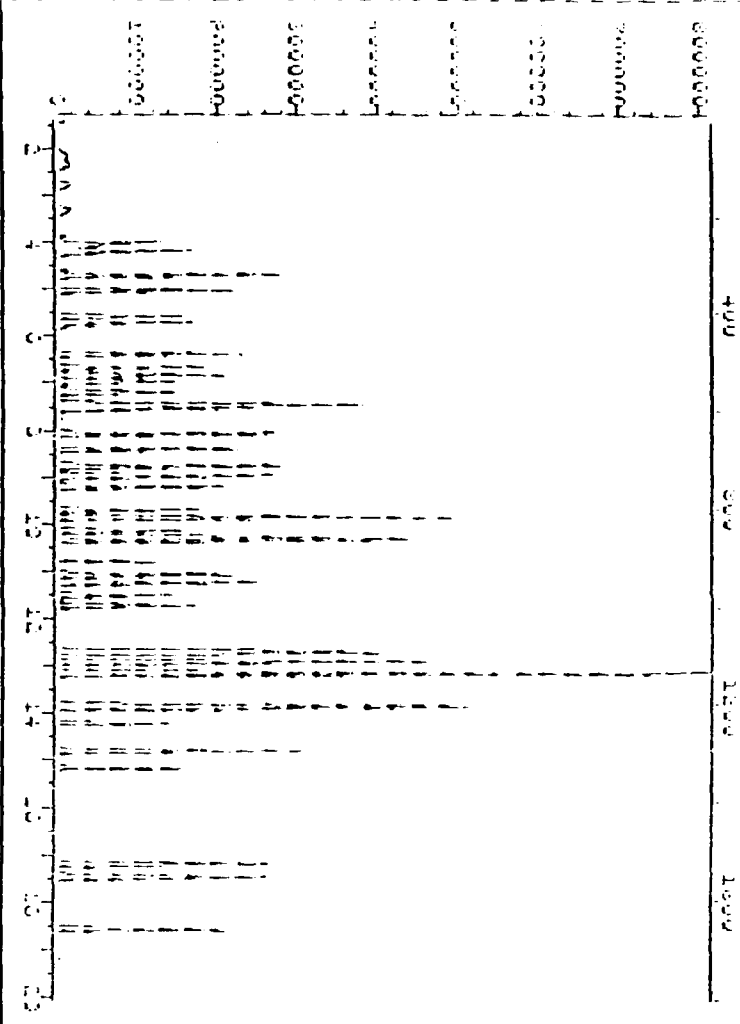
Compound is 1511

Compound	(1.1) u ion	Area	Conc	Units	g
1,2-dichlorobenzene	18.55	110.0	52.54	7/80	26
1,4-dichlorobenzene	17.45	110.0	50.13	7/80	56
1,3-dichlorobenzene	17.13	110.0	51.71	7/80	26
1,2-dichlorobenzene	14.78	110.0	50.83	7/80	83
1,4-dichlorobenzene	13.82	110.0	50.53	7/80	56

8000000

# TOTAL ION CHROMATOGRAM

File: V55686 35.0-270.0 sec. 50PPM VOA STD TIC



Data File: V55686:04

Quant Output File: V55686:04

Name: 50PPM VOA STD

MISC:

10 File: 10\_VOA:01

Title: VOA SINGLE POINT DAILY CALIBRATION

Last Calibration: 910211 15:54

Operator ID: AMY

Quant Time: 910212 09:18

Injected at: 910212 08:57

0000009

Case No: Calibration Date: 02/13/92

Operator: CLAYTON Time: 10:06

Instrument No: Laboratory ID: 000007

Instrument ID: HP-5995 Initial Calibration Date: 01/29/92

Minimum KF for SFCC is .25 Maximum % Diff for ECC is .25

Compound	KF	KF	%Diff	ECC SFCC
Dichlorodifluoromethane	-	-	-	-
Chloromethane	1.59060	2.05553	79.40	..
Bromomethane	1.37167	.96232	29.77	
Methyl Chloride	2.16292	2.06300	30.20	
Chloroethane	1.06203	.63686	59.06	
Trichlorofluoromethane	.98768	1.19535	21.09	
Acrolein	.03717	.05968	58.94	
Freon 113	1.20177	1.92655	59.01	
Acrylonitrile	.54815	.44015	19.70	
Methylene Chloride	1.59698	2.46475	54.34	
Acetone	1.32213	1.30045	1.12	
Carbon Disulfide	3.51357	5.13147	45.06	
1,1-Dichloroethene	.65379	1.30028	99.96	*
1,2-Dichloroethane	4.21624	4.40674	4.39	**
Trans-1,2 Dichloroethene	1.46097	1.60543	9.29	
Cis-1,2-Dichloroethene	1.03665	2.06464	12.72	
Chloroform	3.77029	3.97175	5.34	
1,2-Dichloroethane-04	2.93719	2.70205	5.26	(Conc=50.0%)
1,2-Dichloroethane	3.90720	3.59210	8.06	
n-Butane	.66256	.64007	35.69	
Carbon Tetrachloride	.50003	.02206	42.73	
Vinyl Acetate	.53754	.73943	37.52	
Bromodichloromethane	.60163	.57339	25.20	
2-Chloroethylvinyl ether	.37103	.39245	4.20	
1,2-Dichloropropane	.57400	.62002	17.42	
Cis-1,3-Dichloropropene	.66393	.90013	49.21	(Conc=60.0%)
Trichloroethene	.37690	.40092	22.25	
n-Butene-08	1.21743	1.53107	25.74	(Conc=50.0%)
Chlorochloromethane	.55290	.70937	42.06	
1,1,2-Trichloroethane	.36440	.51236	42.75	
Gasoline	1.37845	1.67002	21.55	

05 - Response Factor from daily standard file is: 50.00 W/L

06 - Average Response Factor from Initial Calibration Form V2

07 - % Difference from original average of curve

08 - Calibration Check Compounds (4) SFCC - System Performance Check Compounds (4)

00000000

Calibration Date: 10/07/01

Date Recd:

Time: 10:04

Compound: CLAYTON

Laboratory ID: 40030

Contract No:

Initial Calibration Date: 09/27/01

Instrument ID: HP-5895

00000011

Minimum RF for SPEC is .25      Minimum % Diff for SPEC is 5%

Compound	RF	RF	% Diff	% Diff SPEC
2-Pentyl-1,3-Dichloropropene	.64124	1.08432	70.83	(Spec=25.00)
Bromobenzene	.41930	.60195	43.56	..
4-Methyl-2-Pentanone	.79553	.69815	12.28	..
2-Hexanone	.72331	.79487	9.11	..
Tetraethylborate	.74503	.23306	18.06	..
1,1,2,2-Tetrachloroethane	.53361	.54883	2.88	..
Toluene	.02923	.68601	15.87	..
Chlorobenzene	.90730	1.02143	3.25	..
1,4-Dichlorobenzene	.46317	.49990	3.46	..
Styrene	1.04224	1.13016	8.46	..
2-Methyl-2-Pentanol	.54913	.59030	7.50	(Spec=100.00)
2-Methyl-2-Pentanol	.55095	.62535	5.02	(Spec=50.00)
2-Methyl-2-Pentanol	.47961	.46672	2.15	..
2-Methyl-2-Pentanol	.84035	.05227	.06	..
1,3-Dichlorobenzene	.84365	.01557	3.23	..
1,4-Dichlorobenzene	.79900	.73314	6.34	..

RF - Response Factor from daily standard file at 50.00 UG/L

RF - Average Response Factor from Initial Calibration Form VI

% Diff - % Difference from original average of curve

SPEC - Calibration Check Compounds (%)      SPEC - System Performance Check Compounds (%)



# QUANT REPORT

Operator ID: AMY  
 Output File: VS687::D4  
 Data File: VS687::D4  
 Name: SUPPLY VOA STD  
 Date:

Quant Rev: 0 Quant Time: 910213 10:27  
 Injected At: 910213 10:00  
 Dilution Factor: 1.00000

1000012

File: ID\_VOA::QT  
 Title: VOA SINGLE POINT DAILY CALIBRATION  
 Last Calibration: 910212 09:44

	Compound	R.T.	q ion	Area	Conc	units	q
1)	Abromochloromethane	6.61	128.0	40807	50.00	UG/L	96
2)	Chloromethane	2.08	50.0	116444	70.16	UG/L	96
4)	Bromomethane	2.72	94.0	39310	59.23	UG/L	92
5)	Vinyl Chloride	2.28	62.0	116047	64.74	UG/L	95
6)	Chloroethane	2.85	64.0	17827	63.48	UG/L	89
7)	Trichlorofluoromethane	3.25	101.0	48803	47.25	UG/L	92
8)	Acrolein	3.87	56.0	2411	37.89	UG/L	100
9)	Freon 113	3.99	101.0	78372	57.80	UG/L	91
10)	Acrylonitrile	5.00	53.0	17961	39.47	UG/L	99
11)	Methylene Chloride	4.63	84.0	100579	51.55	UG/L	72
12)	Acetone	4.11	43.0	52496	44.62	UG/L	77
13)	Carbon Disulfide	4.11	76.0	209400	53.61	UG/L	100
14)	1,1-Dichloroethene	3.92	96.0	53081	52.95	UG/L	79
15)	1,1-Dichloroethane	5.53	63.0	179581	48.97	UG/L	90
16)	Trans-1,2 Dichloroethene	4.97	96.0	65515	53.16	UG/L	67
17)	Cis-1,2-Dichloroethene	6.30	96.0	84260	53.48	UG/L	74
18)	Chloroform	6.76	83.0	162075	50.44	UG/L	92
19)	1,2-Dichloroethane-d4	7.41	65.0	113527	43.40	UG/L	81
20)	1,2-Dichloroethane	7.51	62.0	146583	42.53	UG/L	91
21)	1,4-Difluorobenzene	8.05	114.0	150034	50.00	UG/L	100
22)	2-Butanone	6.37	72.0	6132	38.75	UG/L	81
23)	1,1,1-Trichloroethane	6.95	97.0	124207	68.35	UG/L	82
24)	Carbon Tetrachloride	7.15	117.0	110939	67.40	UG/L	84
25)	Bromodichloromethane	9.17	63.0	128056	58.32	UG/L	92
26)	2-Chloroethylvinylether	9.67	63.0	58130	46.85	UG/L	88
27)	1,2-Dichloropropane	8.73	63.0	94075	53.43	UG/L	90
28)	Cis-1,3-Dichloropropene	9.85	75.0	239606	91.04	UG/L	92
29)	Trichloroethene	8.38	130.0	69153	58.86	UG/L	91
30)	Toluene-d8	10.24	98.0	229715	62.01	UG/L	95
31)	Dibromochloromethane	11.69	129.0	118522	71.31	UG/L	96
32)	1,1,2-Trichloroethane	11.06	97.0	76949	66.39	UG/L	91
33)	Benzene	7.45	78.0	251466	57.36	UG/L	100
34)	trans-1,3-Dichloropropene	10.77	75.0	65782	26.42	UG/L	94
35)	Bromoform	14.21	173.0	90313	73.23	UG/L	98
36)	Chlorobenzene-d5	12.66	117.0	239151	50.00	UG/L	93
37)	4-Methyl-2-Pentanone	10.13	43.0	165051	39.22	UG/L	70
38)	2-Hexanone	11.51	43.0	190047	52.16	UG/L	74
39)	Tetrachloroethene	11.22	104.0	70066	41.31	UG/L	94
40)	1,1,2,2-Tetrachloroethane	15.17	83.0	130776	45.02	UG/L	95
41)	Toluene	10.34	92.0	166643	38.40	UG/L	85
42)	Chlorobenzene	12.71	112.0	244290	48.08	UG/L	95
43)	Ethylbenzene	12.91	106.0	119552	47.92	UG/L	95
44)	Styrene	13.89	104.0	271719	49.55	UG/L	83

Quality Assurance Results Summary  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.47

Lab Number:	Calibration Check Standard	Date Analyzed:	02/18/91
Analytical Method:	EPA 7196	Unit:	mg/L
Standard Source:	HACH 23AO		

Analyte	True Value	Measured Value	Recovery (%)
Chromium VI	0.05	0.052	104

Accuracy Control Limit: (%) 85-115

Quality Assurance Results Summary  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.47

Lab Number:	Calibration Check Standard	Date Analyzed:	02/21/91
Analytical Method:	EPA 7196	Unit:	mg/L
Standard Source:	HACH 23AO		

Analyte	True Value	Measured Value	Recovery (%)
Chromium VI	0.05	0.049	98

Accuracy Control Limit: (%) 85-115

Quality Assurance Results Summary  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.47

Lab Number:	Calibration Check Standard	Date Analyzed:	02/20/91
Analytical Method:	EPA 6010	Unit:	mg/L
Standard Source:	Plasma Chem		

Analyte	True Value	Measured Value	Recovery (%)
Copper	2.0	1.98	99
Nickel	2.0	2.00	100

Accuracy Control Limit: (%) 85-115

Quality Assurance Results Summary  
for  
Stoody Industry

Client Reference: 33508.00  
Clayton Project No. 91020.47

Lab Number:	Calibration Check Standard	Date Analyzed:	02/20/91
Analytical Method:	EPA 6010	Unit:	mg/L
Standard Source:	Plasma Chem		

Analyte	True Value	Measured Value	Recovery (%)
Copper	2.0	2.03	102
Nickel	2.0	2.05	103

Accuracy Control Limit: (%) 85-115